ADVANCED

MANAGEMENT

MARCH 1958
VOLUME 23 No. 3

TOLEDO PUBLIC LIBRARY
BUSINESS SERVICE
MAR 21 1958

This issue commemorates the 101st Anniversary of Frederick Winslow Taylor

In This Issue . . .

Taylor's Message For Today's Managers
Dr. Ir M. G. Ydo

The Integrity of Frederick Winslow Taylor
Colonel Lyndall F. Urwick

When The Brass Loses Its Glitter
C. B. Bjornson

3 σ ?
Billy E. Goetz

Wallace Clark's Contribution To International Management
Harold F. Smiddy

(*Full contents on page* 3)

Published by **The Society for Advancement of Management,** the national professional organization of management people in Industry, Commerce, Government and Education, with national, regional and chapter activities.

HOSPITAL MANAGEMENT Conference

A Feature of S.A.M's National Civic Affairs Program

March 14 • Hotel Commodore - East Ballroom • New York

The cost of operating American hospitals amounts to a staggering 2½ billion dollars annually. Maintaining the traditionally high standards of our medical institutions, in the face of constantly increasing operational costs, is a problem of national importance. The purpose of this conference is to assist in keeping these costs in line through the presentation and evaluation of latest advances in hospital administration, and a discussion of how certain proven industrial techniques can help hospital administrators get the most from their management dollar.

PROGRAM

A.M. Theme:

The Art Of Managing

WHAT IT TAKES TO BE A GOOD ADMINISTRATOR
John Hite, Training Director, Johnson & Johnson, New Brunswick, N. J.

TRAINING FOR HOSPITAL MANAGEMENT
Lt. James Kelly, USN Rtd., Naval School, Hospital Administration, Bethesda, Md.

ORGANIZATION AND DEVELOPMENT OF THE MANAGERIAL FUNCTION
Donald V. Schoeller, Director of Executive Development, Remington Rand, New York

P.M. Theme:

Getting The Most For Your Management $

A Panel Discussion—Panelists & Subjects:

THROUGH BETTER ACCOUNTING METHODS
John H. Beddow, Director, Middlesex General Hospital, New Brunswick, N. J.

THROUGH BETTER STAFF ORGANIZATION
Sister Ellen Patricia, Administrator, St. Elizabeth Hospital, Elizabeth, N. J.

THROUGH BETTER PERSONNEL ADMINISTRATION
Paul Cox, Personnel Director, Hercules Powder Company, Parin, N. J.

Luncheon Speaker

EXECUTIVE APPRAISAL

Dr. F. F. Bradshaw, President, Richardson, Bellows, Henry & Co., New York, and former National President and Chairman of the Board of S.A.M.

REGISTRATION CARD — Clip and Mail Now

HOSPITAL MANAGEMENT Conference • March 14, 1958 • Hotel Commodore • New York

For immediate registration complete and mail the following:

NAME .....

NAME .....

NAME .....

NAME .....

ADDRESS .....

.....

Please make check payable to:

SOCIETY FOR ADVANCEMENT OF MANAGEMENT
74 Fifth Avenue • New York 11, N. Y.

S.A.M Member $35.00
Non-member $45.00

☐ Enclosed find check.
☐ Bill me.
☐ Send information regarding S.A.M membership.

•

The $10.00 differential for non-members may be applied to a S.A.M membership if the registrant can qualify.

•

Registration fee includes luncheon.

•

Reservations of hotel rooms should be made directly to hotel of your choice. The Hotel Commodore will hold a block of rooms for registrants of this S.A.M conference until one week before the event.

TOLEDO PUBLIC LIBRARY
PUBLIC SERVICE
MAR 21 1958

NATIONAL OFFICERS: 1957-58

CHAIRMAN OF THE BOARD
JOHN B. JOYNT, Vice President of Management Planning, N. Y. Central Railroad

PRESIDENT
HOMER E. LUNKEN, Vice President and Director, The Lunkenheimer Company, Cincinnati, Ohio

1st VICE PRESIDENT
PHIL CARROLL, Professional Engineer, Maplewood, N. J.

2nd VICE PRESIDENT
MAURICE R. BACHLOTTE, Methods and Standards Supervisor, E. I. du Pont de Nemours & Co., Inc., Old Hickory, Tenn.

SECRETARY
HUGO W. DRUEHL, President, Arrowhead and Purchas Waters, Inc., Los Angeles

TREASURER
FRED E. HARRELL, Gen. Mgr., Curtiss-Wright Corp., Marquette Div., Cleveland, Ohio

EXECUTIVE VICE PRESIDENT
HAROLD R. BIXLER

VICE PRESIDENT, INDUSTRIAL ENGINEERING
RALPH M. BARNES, Professor of Engineering & Production Management, University of California, Los Angeles

VICE PRESIDENT, INDUSTRIAL RELATIONS
SAMUEL L. H. BURK, Principal, Rogers, Slade & Hill, New York

VICE PRESIDENT, RESEARCH AND DEVELOPMENT
RALPH C. DAVIS, College of Commerce & Administration, Ohio State University, Columbus, Ohio

VICE PRESIDENT, MARKETING
ALAN SEARES, Vice President, Sperry Rand Div., Remington Rand, Inc., New York

VICE PRESIDENT, MATERIALS HANDLING
WARREN J. KING, Associate Editor, McGraw-Hill Publishing Company, New York

VICE PRESIDENT, MEMBERSHIP
EUGENE R. RUARK, Personnel Director, Indiana Farm Bureau Cooperative Assn., Inc., Indianapolis, Indiana

VICE PRESIDENT, CHAPTER CONFERENCES AND SEMINAR DEVELOPMENT
LESTER F. ZERFOSS, Staff Advisor for Executive Development, American Enka Corp., Enka, N. C.

VICE PRESIDENT, SENIOR CHAPTER OPERATIONS
DAVID N. WISE, Manager, Applied Research & Engineering, Safety Products Div., Mine Safety Appliances Co., Pittsburgh

VICE PRESIDENT, SMALL BUSINESS
L. T. WHITE, Vice President, Cities Service Petroleum, Inc., New York

VICE PRESIDENT, CENTRAL REGION
EDWARD C. EBELING, Vice President and General Manager, Leland Electric Company, Dayton, Ohio

VICE PRESIDENT, MIDDLE ATLANTIC REGION
OLIVER J. SIZELOVE, Chairman and Professor, Dept. of Management Engineering, Newark College of Engineering, Newark, N. J.

VICE PRESIDENT, NORTH CENTRAL REGION
GEORGE W. TALLEY, Superintendent of Assembly, Cutler Hammer, Inc., Milwaukee

VICE PRESIDENT, NORTHEASTERN REGION
ROBERT W. MacWILLIAMS, Senior Industrial Engineer, Ernst & Ernst, Boston

VICE PRESIDENT, SOUTHEASTERN REGION
HEZZ SPRINGFIELD, Jr., Exec. Asst. to Director, Oak Ridge Natl. Lab., Union Carbide Nuclear Co., Oak Ridge, Tenn.

VICE PRESIDENT, WESTERN AREA CHAPTERS
WILLIAM R. WILLARD, Director of Organization Planning, Columbia Geneva Steel Div., U. S. Steel Corp., San Francisco

NATIONAL OFFICE STAFF

HAROLD R. BIXLER, Exec. Vice President

HAROLD FISCHER, Vice President, University Chapter Division —Professor of Business Administration, Franklin & Marshall College, Lancaster, Pa.

GEORGE M. GOETTELMAN, Vice President, Civic Affairs

VINCENT A. FLYNN, Ph.D., Research Director

PATRICK J. REDDINGTON, Educational and Conference Director

MARION CUSICK, Office Mgr. and Asst. Treas.

BEATRICE JONES, Publications Editor

Over 50,000 people read

ADVANCED MANAGEMENT

PROGRESS THROUGH ENLIGHTENED MANAGEMENT

"Through research, discussion, publications, and other appropriate means, to conduct and promote scientific study of the principles governing organized effort in industrial and economic life . . . for the general betterment of society . . ."

S.A.M Constitution

Production Editor: Beatrice Jones
Editorial Advisory Board: The S.A.M Functional and other National Officers also serve in this capacity.

MARCH 1958

Vol. 23 No. 3

CONTENTS

Articles

PLANNING—KEY TO THE FUTURE
by H. E. Lunken 4

TAYLOR'S MESSAGE FOR TODAY'S MANAGERS
by Dr. Ir M. G. Ydo 5

THE INTEGRITY OF FREDERICK WINSLOW TAYLOR
by Colonel Lyndall F. Urwick 9

WALLACE CLARK'S CONTRIBUTIONS TO INTERNATIONAL MANAGEMENT
by Harold F. Smiddy 17

HAVE YOU A DEPRESSION PSYCHOSIS?
by E. R. Ruark 21

WHEN THE BRASS LOSES ITS GLITTER
by C. B. Bjornson 22

3 σ ?
by Billy E. Goetz 23

ORGANIZATION
by Charles Saunders-White 31

Features

University Chapter Membership Standings 8

CIPM Reports 8

National Officer Nominees—1958-59 11

Admiral Radford Speaks at S.A.M Dinner To Honor Reuben Robertson 20

S.A.M Newsletter
by Harold R. Bixler 24

New Management Writing
S.A.M Book Service 26

Typical S.A.M Chapter Activities—April 1958 28

The following items are registered trademarks owned by the Society for Advancement of Management, Incorporated: ADVANCED MANAGEMENT, S.A.M., *and the seal*

ADVANCED MANAGEMENT, published monthly by the Society for the Advancement of Management, Inc., 74 Fifth Avenue, New York 11, N. Y., is successor to The Society for the Advancement of Management Journal, the Bulletin of the Taylor Society and of The Society of Industrial Engineers. Reentered as second-class matter, December 23, 1949, at the Post Office at New York, N. Y., under the Act of March 3, 1879. Copyright, 1957, Society for Advancement of Management. Permission must be obtained for reprinting, digesting, or quotation. Subscription rates: $8.00 per year. Single copies: 75 cents (members); $1.00 (non-members). All members receive this publication, for which $4.00 of their dues is allocated. Reprints of articles readily available in quantity, price schedule on request. An index to ADVANCED MANAGEMENT is published annually, and the contents are also indexed in industrial Arts Index, available at Public Libraries. Notification of address changes must be given four weeks in advance.

The Editorial Advisory Board will be pleased to review manuscripts submitted for publication, but will not be responsible for loss in transit, safe custody or otherwise. DISCLAIMER: The views of the authors are not necessarily those of the Society for Advancement of Management, S.A.M will not be responsible for any liability that might develop as a result of articles published in this magazine.

Planning—Key To The Future

PLANNING, in "The Thirties," was looked upon with suspicion by some people, who associated it with The Russian Five Year Plan and a planned economy. Those who engaged in planning were thought to be impractical theorizers, dreamers, or dangerous radicals. Fortunately, the term has lost its undesirable connotations today.

Planning is an accepted practice in government, business, and all kinds of organizations which have goals and objectives to achieve. It is a basic function of every manager's job and in every business organization. Forecasting is the process of looking ahead into the future, whereas planning involves deciding what we will do under the conditions which we forecast. Whether we like it or not, we simply must plan in order to make progress.

In management we deal with formal and informal plans, and, with long and short range plans. We make comprehensive plans for entire organizations and segments of organizations. We also make plans for specific tasks which are related to our over-all plans. Top level managers should be engaged most of their time in planning activities, whereas those in first line supervision spend only a small proportion of their time in performing this function. We, of course, perform planning activities in all of the areas of management: general management, marketing, manufacturing, engineering, finance, personnel, purchasing, etc.

There is an important difference between formal and informal planning. Informal planning usually results in the absence of an orderly, systematic approach. When we formalize this activity, we give it conscious effort for the purpose of reducing the area of judgement to a minimum, by making a thorough and objective forecast of future conditions, and by getting those involved in the particular area under consideration to participate in the formulation of the specific plans and in setting goals. When we are dealing with a complex situation, a carefully thought out plan is always better than no plan at all, even though circumstances may change, causing substantial modification of the original plan. The process of forecasting, even if early attempts are disappointing, and the process of weighing alternate courses of action usually results in sounder conclusions than otherwise would be possible. Should it develop that plans must be modified or scrapped entirely, having gone through the planning process often helps bring about early recognition that the situation, upon which the plans were based, has undergone change.

The manager who says "I can't plan" is only making excuses in order to avoid a process which he hasn't carefully thought out or investigated. The question which we should ask ourselves, as managers, is not "Should we plan?", but "How can we plan more effectively?"

H. E. Lunken
S.A.M National President

Taylor's Message For Today's Managers

By Dr. Ir M. G. Ydo

Management Consultant
Amsterdam, The Netherlands

FREDERICK WINSLOW TAYLOR, who was born 101 years ago, did everything within his power to show the way to change

"the negative, depressing influence of the workshop on the character of the individual worker into a positive, stimulating influence through which the workers cannot only earn more, but also get more satisfaction out of their work and moreover . . . . can develop themselves fully during their work."

Many people look upon character-forming exclusively as a part of education, which begins at home and continues at school. But character-forming does not stop when people leave school. A character is continually moulded during everyday life. And on the job characters are formed, or deformed.

Neither dividends, profits, not even productivity was Taylors highest aim; but the character-forming of the workers.

However, after a thorough study of his work and above all his life, I came to this conclusion: that the techniques which Taylor developed are more often used to enlarge profits than to form the characters of the workers.

Techniques are important because without them men would never be able to accomplish anything. Techniques are necessary as a medium to gain a definite purpose. So the purpose is primary and the techniques are secondary.

Taylor's *techniques* are understood, but not his *aim*. And these techniques—for instance, timestudy—can be used for different purposes. Because people did not understand Taylor's purpose, they used his techniques in a different sense than Taylor intended them to be used, and this resulted in the "Taylorsystem", which does not fit Taylor at all.

Taylor's Social Interest

Everybody knows from experience that the better we get to know someone, the more we understand his outlook on life; the more we know of his experiences and, above all, of his character, the better we are able to understand him. This, of course, also applies to Taylor. We have to know the man Taylor to understand his way of management. And, fortunately, Frank B. Copley's excellent biography of Taylor enables us to do so.

Taylor's parents were well-to-do. From his father's side he belonged to the 5th American-born generation and from his mother's side even to the 7th. As well from his father's as from his mother's side, he was a direct decendant of the first settlers of the 17th century, who, because of their faith, had chosen a free but difficult life, which they preferred to the difficulties brought about by the founding of the Church of England.

When Taylor was thirteen years of age his whole family went to Europe for three years for the education of the children. When they returned, his parents sent him and his older brother to Exeter to prepare for Harvard College. They wanted Fred to study law. He passed the Harvard examinations with honors, but he had eye trouble and on advice of his doctor he had to give up his studies. Afterwards, it turned out that his eye-trouble wasn't so serious, yet this little incident changed his career radically. His father thought he had better learn a trade. Consequently, Taylor, at the age of eighteen, went to work as an apprentice to learn the trades of patternmaker and machinist.

His Study Of The Worker

In view of the environments in which Taylor grew up, his education and the fact that this intelligent boy preferred gathering knowledge by doing manual labor, it is not so strange that in the course of his apprenticeship he was most interested in the behavior of the workers.

He soon noticed that the average worker had the tendency to do only as much work as necessary to keep his job, and that he worked harder at home than he did in the workshop. He also noticed that an agreement existed among the men to keep production as low as possible and that the group used "social-pressure" upon the individual worker when he did not keep to this agreement. He also became aware of the fact that the foreman was

This article is a summary of the book on Frederick Winslow Taylor, by Dr. Ydo, published in Holland early in 1957.

DR. YDO was born in The Netherlands in 1913. After graduating in Mechanical Engineering from the Technical University at Delft, Holland, in 1936 he joined the staff of a firm of management consultants. While making time studies he realized that efficiency in industry depends basically upon the will-to-work. After interviewing 2,000 workers he started, as an independent management consultant, a study on job-satisfaction. The results of this study brought him his degree in 1947. Meanwhile, his office has now grown into a staff of forty whose main activity is to achieve the link between increasing productivity and the will-to-work in industry.

misled about the time in which various jobs could be done.

Taylor faced fact after fact. How could the workers raise their standard of living when they did not want to enlarge their output? How could they develop themselves when they did not attempt to do more? How could they form their characters by systematically deceiving the management?

These were the questions which oppressed Taylor when he became acquainted with factory-life. He was deeply shocked in his convictions and in his belief in society by the behavior of the men. Because this behavior was entirely antagonistic to the image of the human being with which he was familiar. Was the behavior of the men in the shop in conformity with human nature or was it a pose, a role they played? Were the men happy during their work or were they bored and miserable?

His reaction was typical for his personality; he refrained from giving a judgment but started to investigate the matter. He talked to the men singly in order to understand why they behaved as they did. During this time he made himself familiar with the coarse language of the workshop and even wore the same clothers as the men. He visited the workers at their homes and spoke nearly exclusively of the situations in the workshop. In this manner Taylor studied the workmen for about four years.

He discovered that at home a worker behaved differently than at the factory, that he said different things in an eye-to-eye talk than in a group, and from talks with them he became aware of the fact that they were not happy at their work. From this Taylor drew the conclusion that the workers played a role in the factory that they did not like but which was forced upon them by the bad experiences the workers as a class had had for generations. The workers were not by nature as they seemed to be in the workshop. How much more energetic, happy and content these men could be, if they could, like so many others, put their heart into their work, Taylor reasoned.

The Conflict With His Conscience

At the age of twenty-two, Taylor was appointed to foreman of the turners. As a supervisor, he felt himself responsible for the welfare of his men and did not tolerate the bad influence of the workshop on their characters. In order to change this it took him three years of hard fighting against the informal organization of his department. By then he had nearly doubled the output of each worker. This was quite a success, but to Taylor it was not enough.

A young man of not yet twenty-five, he had managed his workshop in the way he was taught, which was quite normal in those days. But morally he loathed this way of management because he thought of his men as human beings like himself. He had not been able to convince them but only to lay his will upon them. "*This life was a miserable one, and I made up my mind either to get out of the business entirely and go into some other line of work, or to find some remedy for this unbearable condition.*"

It is quite remarkable that immediately after Taylor had won the piece-rate war, he had, in only a few years time, all the inspirations which later formed the fundamentals of his new way of management. Did all this happen by chance? New, world-shaking ideas usually do not come by themselves. They are nearly always the discharging of a great inner tension. I believe that Taylor, in previous years struggled with a great inner conflict—a conflict leading to the creation which Taylor himself named "task management", but which later on was renamed "scientific management" by others.

The Creation: Task Management

The "art of management" consists of the necessary techniques which are the elements of the mechanism of management, and its essence, which consists of a certain philosophy. When this distinction is made in task management, it attracts attention that the mechanism of task management has been widely spread and developed since Taylor, without much care about the philosophy it bears upon. "*When, however, the elements of this mechanism, such as timestudy, instruction cards etc. are used without being accompanied by the true philosophy of management, the results are in many cases disastrous.*" There have been many bad experiences with this mechanism of task management indeed, but fortunately there is a growing interest for the deeper sense of management at present. Therefore, it seems useful to ask: What did Taylor mean by the true philosophy of management?

"*Now, in its essence, task management consists of a certain philosophy, which results in a combination of the four great underlying principles of management.*" First: Management is responsible for *the scientific education and development of each man.* This has become self-evident after the preceding pages. But how can you help a man who looks upon you as an enemy? Therefore, the second principle is: It is the task of the management to bring about *an intimate friendly cooperation between the management and the men.* To Taylor these principles were no hollow words, but experiences deeply lived through.

To apply these principles, Taylor needed techniques. Where else could he find them but at school? For at school techniques are used for educational and character-forming purposes. And indeed Taylor had that which he called "*the central idea*" of his way of management adopted from school; the *task-idea: "give each worker a definite task, namely, a given amount of work which he must do within a given time."* In a shop however, in contrast with school, the tasks to be performed do not result from a schedule, but from a variety of orders to the company. To gain Taylor's objectives the foreman has to distribute these tasks among his men and to take care that each task has an *educating* value to the worker. So the task idea leads to the third principle: The management is responsible for *the scientific selection of the worker.*

When we look upon a task as a medium to educate and develop a worker we must not only tell this worker "what he has to do", but also "how" and "how long" he is expected to work on it. This "how" and "how long" makes the task-setting extremely difficult. And when we couple the time to the wages, by means of an incentive plan, this task-setting becomes, moreover, a particular responsible job. It has been a very lucky hit of Taylor to base the task-setting on facts instead of opinions, in which he followed the example of his former professor of mathematics. To gather the facts he made a thorough study of such element of a man's work. The results of these studies surpassed his highest anticipation. And so Taylor came to his fourth principle: The management is responsible for *the development of a true science*, for each element of a man's work which replaces the old rule-of-thumb-method.

But what do these principles tell us at present? No one will deny them. For many, however, these principles remained a theory; they did not incorporate them. "*Task management, however, is not a theory, but is the practical result of a long evolution.*" Therefore, a complete mental revolution is necessary to attain the true philosophy of management. Let's now try to grasp what Taylor meant by this.

What Does The Worker Expect From His Work?

The rise of modern industry did put management up against terrific technical and economical problems, the solutions of which were vital to the enterprise. Because of this the management could not find time to care about the problems of the workers. Management assumed that a human being *has* to work to earn money and that the only thing the worker expects from his work is money. The complaints of the workers strengthened this opinion of the management.

From later research it became evident that complaints are mostly misleading. The research at the Hawthorne Works, for instance, led, after a thorough analysis of the many complaints, to the conclusion that there had to be made a distinction between complaints as they manifested themselves

and the deeper cause, a distinction between *what* they complain *about* and *why* they complain. The manifest content of a complaint—for instance, wages—is mostly a staff to beat a dog.

Out of more than 2,000 interviews I had with workers, it became evident that about a third of the workers felt themselves more or less treated as a number. Statistically it was shown that out of the 38 examined factors this "being-a-number" feeling correlated negatively with the factor "the emotional tie to the firm", much more than with the factor, "the contentedness with the wages."

Nevertheless, the workers complain more often about their wages than about lack of attention of their supervisors.

My research showed, also, that the worker who appreciates his supervisor gets more satisfaction out of his work than he who complains about his supervisor. Being depended on his supervisor, the worker expects something of him. What this "something" is, however, he does not know, so he cannot tell it either. If the supervisor does not meet his expectations, the worker gets an undefined feeling of uneasiness; this results in a dislike towards his work. Apparently a worker does expect more out of his work than mere money.

Modern social-psychological research shows in a more and more convincing way that a worker is not a homo-economicus and that the behavior of the worker in the workshop is for the greater part determined by all kinds of feelings. And it is a surprising fact that the results of modern research were felt intuitively by Taylor.

We have seen how deeply Taylor's convictions were shocked when he got acquainted with the workshop, because the behavior of the workers did not fit in with the image of the human-being with which he became familiar at home. Four years of his life he dedicated to a study of the worker on the job and in the home. The results affirmed his conviction that a man is not an individualist but a social-being who wants to be useful and appreciated, and who has, inside as well as outside the workshop, a crying need for assistance and support in his education.

Taylor based his modern way of management on this image of the human-being. They who assume that the worker mainly acts upon economical motives will never be able to understand Taylor's ideas. They need to undergo a complete mental revolution in order to attain the true philosophy of management. Otherwise, they will use the mechanism of task management in a different sense than Taylor intended it to be used; with all the consequences involved.

The Foreman's View Of The Shop

This different conception of a human being logically leads to a changed view of the duties of the foreman. According to the old viewpoint, the foreman had to direct the flow of materials through the different operations in his department. And in doing this he had, above all, to take care of the quality, the cost and the time of delivery of the products. The results of his work were judged by these standards. All technical and economical problems which occurred during manufacture he had to solve himself. Therefore, by preference a skilled worker was appointed as a foreman. No wonder the foreman looked upon his department from a technical and economical point of view, as Figure 1 indicates.

Taylor saw too that a good execution of orders is of vital importance to the company. He also saw that the workers were inadequately managed, so that productivity was low, and the men were discontent. According to him, this was mainly due to: "*the indifference of the employers as to the individual character, worth and welfare of their men.*"

Consequently Taylor, as a manager, made a distinction between directing orders through the shop and giving guidance to the men. To direct orders through the shop and to solve all technical and economical problems, he appointed assistants who could concentrate themselves upon these. Supported by this production-planning-and-control, the foreman could devote himself to his men and manage them in a social and pedagogical justified way.

When we look upon the shop from a social, pedagogical point of view, we notice at once (illustrated by Figure 2) the human relations which make a team out of the separate individuals. Of all these relations, the one between a worker and his supervisor is the most important because the worker expects assistance and further education of him. Seen in this way, it is the responsibility of the foreman to conduct the mutual relations into the right channels, to influence the "standing rule" and to help the men form their characters. "*All day long the management work almost side by side with the men, helping, encouraging, and smoothing the way for them.*" Thus the duty of the supervisor is more like that of a guide and of a referee, than that of a slave-driver and of a policeman.

It has been said that Taylor did ignore the "human factor". Indeed, nowhere in his publications is this term to be found because Taylor did not know a "human factor".

The term "human factor" was created when, in trying to increase the efficiency of production by means of a purely technical, economical procedure, difficulties with the workers arose. The worker, by whose hands the products are made, is one of the many factors that determine productivity. In speaking of a "human factor", attention is focused on production and the workers are put on a level with all other

Old View On The Shop

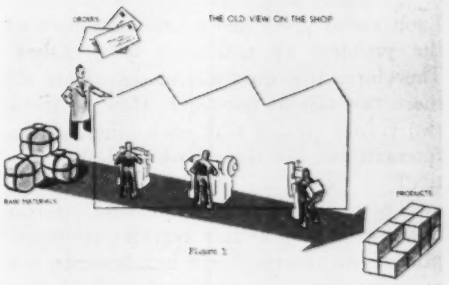


Figure 1

factors, like materials, machines and tools. So the term "human factor" gives evidence of a purely technical, economical view on the worker.

On account of this particular viewpoint, man was looked upon as a coherence of separate qualities, as sometimes has been done in early psychotechnics. It is this viewpoint that resulted in the comparison of human-beings with machines. Even a book has been published with the significant title: *Living Machinery*. This narrow minded conception has led to the application of the mechanical laws to working man, without realizing that a human being is more than a skeleton and a chemical factory. Not unjustly, the workers did complain that they were looked upon as an extension of the machine.

Production Planning and Control

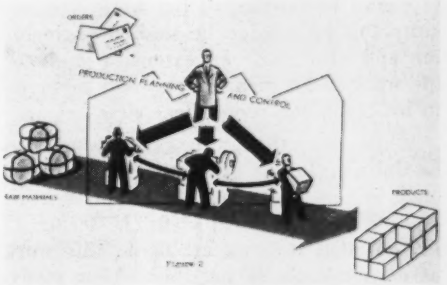


Figure 2

It is true that the ill application of Taylor's way of management has actually raised our standard of living. But it is equally true that it has sooner increased than decreased the psychical problems of the workers. Because of this, the problem of managing men has become more urgent. Everywhere at present this problem is tampered with and experimented on. The danger is not even imaginary, that in doing this we will, like the pendulum of a clock, go from one extreme to the other.

For when the "human factor" was discovered it became evident that we had much more knowledge of materials and machines than of the human being. In order to make up for these arrears, extensive studies have been made on human relations in industry. The results have added to our knowledge considerably. This is a great gain, but we must never forget that this social-psychological vision is as limited as the technical-economical one. A

workshop without a production-process is as imaginary as a department with robots. Each vision gives but a limited aspect of the problem of managing a workshop. Therefore, the question arises: How do these two visions connect? How do these two visions square with each other, so the foreman can use them both in daily practice?

This connection is of present interest because so long as this remains unaccomplished, management will halt between two opinions. On the one side they think that more has to be produced by the workers; on the other side, that management has to do something to benefit the workers. And on account of this halting between two opinions, management misses the power of conviction, and managing has become a problem we have to contend with daily.

Taylor succeeded in connecting the two above mentioned visions. As we will remember, he started his career with a study of the worker. He learned from this that for a worker, work is a part of his life. A worker, too, wants to make something of his work; to realize himself in his work. But under the existing circumstances he was not able to do so. So Taylor arrived at his social, pedagogical views.

Having finished his study of the worker, Taylor became responsible for the output of a department. Then he became aware of the fact that, for the realization of his social, pedagogical ideas, he needed a more profound knowledge of the work. To acquire this knowledge he studied engineering and also made an extensive study of the work of his men. In this way he came to his technical, economical view.

While many thought work in industry to be dulling, Taylor discovered by his thorough studies that even the simplest work is not quite so simple as it seems to be, but that it is an art to do this work as economically as possible. After studying the worker as well as his work, Taylor made the link between the social, pedagogical and the technical, economical vision by using the work as a means par excellence for the character-forming. This was a brilliant idea.

If a supervisor is deep down of the opinion that the work of his men is dulling, he naturally will not be able to use the work as a medium to form the characters of his men. It is the management that has to make work meaningful to its men, as well in a technical, an economical, a social as in a pedagogical way. Only then can we learn the art of living during that vital part of life which we call work. And it is in this respect that the worker desires the example and support of his supervisor. Even though the men come to the shop for economic purposes, the relationship between a supervisor and a subordinate has to be a personal ine. A man to man relationship, that is rooted in the love of one's fellow-creatures. ■

CIPM Reports . . .

CIPM INAUGURATES A MANAGEMENT PROGRAM IN JAMAICA

Last month CIPM added another country to the list of nations in Europe, the Middle East, Latin America, and Asia in which the Council has organized and operated programs of managerial development, thus bringing the total number of countries to eighteen. Early in February of this year, under the auspices of CIPM and the Industrial Development Corporation of Jamaica (IDC), Harold McClellan, President of the Old Colony Paint and Chemical Company of Los Angeles, former Assistant Secretary of Commerce for International Affairs, and also former President and Chairman of the National Association of Manufacturers, went to Jamaica for a week to hold meetings with large groups of Jamaican business leaders. The purpose of these meetings was to present to Jamaicans both the importance of the development of human and material resources and the overall role of management in the industrial community. Following Mr. McClellan's program, four men, two presidents and two vice presidents of U.S. firms, spent two weeks in Jamaica holding seminars in organization, production, marketing, and human relations with top Jamaican executives. One of this group was Lawrence Murphy, Executive Vice President of the Williamson Company, Cincinnati, formerly President of the Cincinnati S.A.M Chapter, and a member of four previous CIPM programs in Austria, France, Turkey, and Israel.

Currently, Allison V. MacCullough, management consultant and president of the Westchester S.A.M Chapter, is spending six weeks in Jamaica holding seminars in organization and administration with representatives of local senior and middle management. Future phases of the CIPM Jamaican program include U.S. specialists in production, marketing, and industrial relations, each of whom will spend six weeks in Jamaica; a man who will organize a series of supervisory training programs; and finally, for forty weeks, a training expert to carry them out.

The entire program has been instigated at the request of the Government of Jamaica, which recognizes "the urgent need for technical training and the development of management skills and techniques in the interest of greater productivity and the improvement of labor-management relations in our current industrial expansion." In 1952, the Jamaican Government established the Industrial Development Corporation, which is organized and operated by businessmen. Its aim is to develop local industries and in this way, provide employment to the large labor force. Financial support for the IDC and its programs is derived mainly from royalties on bauxite exported from the country, for it is the belief of the Jamaican Government that since the country is selling one of its main physical assets, it should use the proceeds from this sale to create other assets. The Minister of Trade and Industry has summed up the objectives of the program in this way: "The industrial training which will thus be made available to Jamaican industry has as its greatest objective the development of industrial leaders on all levels of management and supervision. For the planning, organizing, controlling and coordinating of both human and material resources, the country must look to management to provide the leadership necessary in achieving the development, production, and distribution of the goods and services essential to our well-being."

Jane Dustan
CIPM EDITOR

University Chapter Membership Standings

February 1, 1958

Indiana University	315	Louisiana State U.	50
Miss. State College	220	U. of Tennessee	50
Villanova U.	161	Georgetown U.	48
Northeastern U.	150	Kan State College	47
U. of Texas	148	S. Methodist U.	47
Ga. Inst. of Tech.	147	U. of S. Cal.	47
Tenn. Polytech Inst.	143	Lawrence Institute of Technology	45
U. of Connecticut	131	C. W. Post College of L. I. U.	44
U. of Illinois	131	Clemson College	43
Ala. Polytech Inst.	124	DePaul University	41
St. Peter's School of Business	106	Wayne State U.	41
Ohio University	105	West Virginia U.	41
U. of Alabama	100	Butler University	40
U. of Houston	100	U. of Pennsylvania	40
Xavier University	97	U. of Detroit	39
LaSalle College — Day Div.	97	St. John's U.	38
L. A. State Col. (Ramona)	96	Fenn College	37
Penn. State U.	95	U. of Mississippi	36
Boston College	92	Babson Institute	35
U. of Minnesota	88	Clarkson College of Technology	35
Penn. Military Col.	86	U. of Cincinnati	35
NYU (Sch. of Com. Accts & Finance)	85	Rensselaer Polytechnic Institute	34
Rider College	84	Syracuse University	34
Boston University	80	U. of Baltimore	34
U. of Kansas	74	University of Tulsa	34
Rutgers University	73	Georgia State Col. of Bus. Adm.	33
U. of Pittsburgh	73	U. of Cal., Berkeley	32
Guilford College	71	Arizona State Col.	31
LaSalle Col. (Evening Division)	71	U. of Cal., L. A.	31
American U.	68	San Diego State College	30
U. of Missouri	68	U. of Michigan	30
New Col. of Eng.	67	U. of Rhode Island	30
Miami University	66	Villa Madonna Col.	29
Temple University	66	Michigan State U.	28
U. of Richmond	66	Otterbein College	28
U. of Kentucky	65	Roosevelt University	28
Drexel Inst. of Tech.	63	Hofstra College	27
Bowling Green State University	62	Seton Hall U.	27
U. of Scranton	62	Oklahoma State U.	26
West Michigan Col.	62	Santa Maria Cath. U. of Puerto Rico	26
Woodbury College	62	State Col. of Wash.	26
Ohio State U.	61	U. of Georgia	26
Duquesne University	59	Marian College	24
Gonzaga University	58	U. of Chattanooga	23
Sacramento State College	57	U. of Puerto Rico	23
University of Miami	57	University of Dayton	22
Lamar State Col. of Technology	54	St. Louis U.	22
Franklin & Marshall College	53	City Col of N. Y.	20
Case Inst of Tech.	52	George Wash. U.	20
Cornell University	52	La. Polytech. Inst.	18
L. A. State College (San Fernando)	52	NYU—Sch of Engr.	17
Memphis State U.	52	Wilkes College	17
U. of Oklahoma	52	Yale University	15
Loyola U. of Chgo.	51	N. Tex. State Col.	13
U. of Florida	51	S. Technical Inst.	13
		Antioch College	11
		U. of Bridgeport	9

The Integrity Of Frederick Winslow Taylor

by Colonel Lyndall F. Urwick
Chairman, Urwick, Orr & Partners
London, England

A BOOK was published by the Harvard University Press in the Fall of 1955 which raises by implication some major issues as to the integrity of Frederick Winslow Taylor. The author of the book, Milton J. Nadworny, had the opportunity of working through the Taylor correspondence. His chapters bristle with references and wear the appearance of impartial enquiry. But this academic apparatus thinly conceals his personal bias. The book is an attempt to "debunk" Taylor and his ideas.

Is Management A Science Or An Art?

Referring to the Report of the Committee of the A.S.M.E. (American Society of Mechanical Engineers) in 1912 on *The Present State of the Art of Industrial Management*, the author comments (pg. 44): "*Though it emphasized* (in contradiction to Taylor's stated beliefs) *that management was an art and not a science.*"

The observation that the description of management as an art was "contrary to Taylor's stated beliefs" is simply untrue. Taylor wrote specifically that in his view "*management is destined to become more of an art*".[2] And in discussing the waste that so often results from attempts at reorganization he wrote: "*the reason for this being that there are few employers who look upon management as an art.*"[3] the frequent assertions that Taylor claimed that management as a whole is a science can be traced to two causes:

a) The dual meanings which can be attached to the words *management*, *science* and *scientific*.[4] Thus *management* may mean either the activity (managing) or the body of knowledge about the activity. *Science* may mean either knowledge like that found in the physical sciences or it may mean any organized body of knowledge (cf. "the science of war"). *Scientific* may mean "of or pertaining to the sciences" (i.e. the physical sciences) or it may be used "of an art, based upon or regulated by science as opposed to traditional rules or empirical dexterity."[5]

b) Taylor frequently used the term "a science" to describe the first phase of management—analyzing, measuring and determining the 'one best way' to perform the task asigned to an individual operator. The first new duty which he described as falling upon the managers under the new type of management, as opposed to what he called "the management of initiative and incentive", was "They develop a *science* for each element of a man's work."[6]

Whether this first phase of management can be described as an exact science or not is an open question. What is clear, and a matter of record, is that Taylor himself only spoke, even of time and methods analysis, as "*a science*" in the second sense of that term; namely, that it is possible to build up an organized body of knowledge about it. He himself expressly referred to criticism of the use of the words *science* and *scientific* in connection with management and quoted in reply a definition of *science* which he attributed to President McLaurin of the Institute of Technology, Boston, viz., "classified or organized knowledge of any kind."[7]

Was Taylor "Mechanistic" and Inhuman?

The author refers to "*Taylor's mechanistic science of management*". (pg. 49) Since the first step in the methodology which Taylor developed as the result of his basic ideas was the analysis and measurement of the tasks performed by operators working on *machines*, there was bound to be a "mechanistic" element in it. That the man himself, or his basic ideas, were mechanical and ignored the human element in the problems he attempted to solve is, again, simply untrue. All the evidence available, both from those who worked with him and from statements in his writings, indicate that he was exceptionally kindly in his attitude towards individuals. He certainly neither encountered nor contemplated much difficulty in winning workers round to his methods provided that:

a) He was allowed to set about the task in his own way, to permit time for example to tell and not expected to "rush" the installation of procedures which disturbed the social living of the shop.[8] While he did

---

Colonel Urwick won world-wide reputation as Director of the International Management Institute from 1928 to 1933. Since that time he has served as Vice Chairman of the British Management Council and as an active member of the International Committee of Scientific Management. His books on management include *The Meaning of Rationalization*, *Management of Tomorrow*, *Papers On the Science of Management* (with L. Gulick), *Elements of Administration*, *The Making of Scientific Management* (with E. L. F. Brecht), and *The Golden Book of Management*. Colonel Urwick is recipient of the Gold Medal of the Comité International de l'Organization Scientifique, and the Wallace Clark International Management Award.

Recent Booklets By Lyndall Urwick:

16 QUESTIONS ABOUT THE SELECTION AND TRAINING OF MANAGERS. 1958.
36 pages. 2s.6d. Postage free.

THE LIFE AND WORK OF FREDERICK WINSLOW TAYLOR. 18 pages. 2s.6d.

May be obtained by writing to:
Urwick Orr & Partners, Ltd., 29,
Hertford Street, London, W.1. England

not formulate the reasons for resistance to change, he recognized the fact: "*Through centuries of bitter experience working men as a class have learned to look upon all change as antagonistic to their best interest. They do not ask the object of the change, but oppose it simply as* change. *The first changes, therefore, should be such as to allay the suspicions of the men.*"[9]

b) He did not find an employer who was mean, who was disposed to argue about the high wages he regarded as essential if the workers were to accept the new methods, or to cut rates. He referred to such employers succinctly as "hogs".[10]

His intense pleasure in the upgrading of unskilled men was part of his general ambition that his methods should make a better life possible for all associated with him. His recognition of the urge of every healthy individual to grow, to do more responsible and better work, led to an attitude about promotion which is still the exception even today.[11] It is scarcely a decade since American industry as a whole has begun to take the deliberate development, even of future executives, seriously. Taylor believed that the deliberate development of every employee is an inalienable responsibility of management. In this he was half-a-century ahead of his time and is still ahead of average current practice.

Can Taylor's Methods Be Divorced From His Philosophy?

The author of *Scientific Management and The Unions*—1900-1932, says:

a) "*The Taylor system was only a set of management tools.*" *(pg.* 147*)*

b) "*He (Taylor) was probably the first to combine these elements into a* system." *(p.v. Italics the author's) He refers to Taylor's work as a "system" throughout the book.*

c) "*Taylor separated the mechanisms from the philosophy of his management system. His methods could be applied by many, he said, but unless these were accompanied by the 'philosophy' of scientific management they would prove unsuccessful. This philosophy advocated "close, intimate, personal co-operation between the management and the man, which resulted from a "mental revolution" among workers and managers in their attitude towards their mutual duties. Taylor often relied upon the "mental revolution" argument for a defence of his system." (pp.* 41, 42*)*

In these three statements the author's failure to understand the man he is writing about becomes conspicuous. If there was one occasion in his life when Taylor would have taken the utmost pains to be as definite and clear as he knew about what he meant in using the phrase "scientific management", it was on the occasion of his evidence before the Select Committee appointed by the House of Representatives in 1912. In a carefully prepared statement to that Committee he went out of his way to emphasize that scientific management was *not* merely "a set of management tools" or a "system"—a collection of interrelated methods. One of the best-known passages in his testimony began: "*Scientific management is not any efficiency device, nor is it any bunch or group of devices.*" It continued: "*it is not the printing and ruling and unloading of a ton or two of blanks on a set of men and saying 'Here's your system; go use it'.*" It ended: "*it is not any of the devices which the average man calls to mind when scientific management is spoken of. . . . These devices, in whole or in part, are not scientific management.*"[12] In insisting on the terms "tools" and "system", and in his whole approach to the subject, Nadworny has completely ignored that passage.

In endeavouring to explain positively the "essence of scientific management" Taylor laid down two conditions "*without which scientific management cannot be said to exist in any establishment.*" These were:

a) "*Both sides take their eyes off of the division of the surplus as the all-important matter and together turn their attention towards increasing the size of the surplus.*"[13]

b) "*Both sides must recognize as essential the substitution of exact scientific investigation and knowledge for the old individual judgment or opinion, either of the workman or the boss, in all matters concerning the work done in the establishment.*"[14]

He recognized that to convince employers and workers of the importance of this philosophy, of these two points, would be difficult. It would involve, as he said, "*a mental revolution*".[15] Because both sides were enmeshed in traditional views as to the necessary conflict of interest between them. That is why, as already emphasized, he insisted throughout his writings that it was essential to take plenty of time to develop the measures of reorganization resulting from an application of b, the importance of training *one* man in the new methods as a start and allowing the force of his example gradually to convince the others. He had very little confidence in the effect of verbal argument.

In fact, given his basic attitude towards business, what he was saying was that business, any business, should not be regarded as a piece of property belonging to the stockholders, but as a system of human co-operation. Its first object was to service consumers, not primarily to make things comfortable either for those who owned it or for those who worked in it.[16] Given this view of the purpose and nature of a business enterprise, namely that it is a system of human co-operation for the service of consumers, his two conditions are incontrovertible. No system of co-operation will work well unless those participating in it have (a) a common purpose, and (b) a common method of thinking. Taylor felt that, in business, this common method of thinking should be the scientific method.

He expressed repeatedly his apprehension that men would use the mechanisms which he had developed as the result of applying scientific thinking to business problems without appreciating the importance of the philosophy on which they were based and, therefore, of giving the workers time to understand through experience that, while they were being asked to face big changes, there was a big change on the part of management too. They were no longer being treated as "hired hands", but as individual human beings and partners in a common endeavour.

It was not Taylor who sought to "separate the mechanisms from the philosophy" of scientific management.[17] It is Nadworny and some others who have tried to separate Taylor's philosophy from the mechanisms and by concentrating on the latter and on instances where they have been applied without understanding of the philosophy—with the results which Taylor anticipated—to suggest that Taylor was insincere or his claims ill-founded.

Was Taylor A Slave-Driver?

Nadworny's lack of historic sense appears both in matters of detail and in the large. He writes of Taylor's efforts to lift output when he was first appointed a gang boss at Midvale: "*the fact that he (Taylor) did not know what was "a good day's work" apparently did not prevent him from trying to elicit it from the workers*". *(p.* 8*)* The facts in chronological order are:

Taylor was appointed gang-boss of the lathe-workers at Midvale at the age of 23. He knew from his own recent experience as a lathe operator that there was severe restriction of output in the shop. He had felt himself compelled, while a worker, to conform to this social pattern and to keep his output at round about 50% of his own potential. When he found himself in a responsible position he felt that it

was his duty to the management to try to raise the output to a level which he knew was easily attainable.

A very ugly struggle with the men ensued which lasted for 3 years; there were firings and fines on the one side and sabotage of machine and threats of personal violence on the other. Taylor got his output, but he found the experience most painful. He had been, and remained, personal friends with many of the workers though their official relations were marred by bitterness and ill-feeling. It was this struggle which caused him to study profoundly as to *why* there was this constant strife between managers and operators.

He came to the conclusion that what was lacking on the management's side was "*exact knowledge as to how long it ought to take the workman to do his work*". The men were decent workers and willing to do "a fair day's work" for a fair day's pay. The employers were willing to give a fair day's pay for a "fair day's work". But neither side had any precise knowledge as to how many units of production constituted a "fair day's work". They were squabbling about an unknown quantity. So Taylor bought a stop-watch and started on the experiments which led to the start of scientific management.[18]

These details as to the *order* of events were all fully recounted by Taylor himself. He admitted freely that, when first appointed a gang-boss, he had tried to manage in the old-fashioned way, basing the workers' output he demanded of the men on his *personal* experience. It was the ugly consequences of this form of management that set him enquiring as to whether a better way could not be found and directed his attention to the possibilities of measuring exactly what constituted a "fair day's work".

Nadworny suggests that Taylor lacked integrity and good feeling towards his men by quoting a conclusion Taylor had arrived at *after* and *because of* an experience, and applying it to Taylor's conduct 3 or 4 years previously.

Did Taylor Attack The Trade Unions?

Far more serious from the standpoint of historical integrity is the author's failure to bring out the fact that Taylor did *not* attack the Trade Unions; they attacked him. Nadworny does not relate Taylor's attitude towards the organized labour movement to the time and climate of opinion in which the events he records took place. He comments that: "*While it is true that Taylor hardly would have been human if he had not been affected by the warfare begun in* 1911 *by the chiefs of the labour movement, he would have been extremely naive had he not expected it. Throughout his life he represented ideas which were in direct contrast to the ideals and objectives of the labour movement.*" (p. 85)

1958-59 S.A.M National Officer Nominees

THE S.A.M 1958-59 Nominations Committee was elected at the National Board of Directors meeting on November 2, 1957. All Chapters were requested to submit their nominations for National Officers. Based upon recommendations made by the Chapters to the Committee, all names submitted were carefully considered. The Nominations Committee was gratified that a large number of nominations for the new year's National Officers were made by the Chapters.

The Committee met again in February 1958 and reported to the National Executive Committee on February 8th. They have unanimously nominated the officers listed below for the 1958-59 term. These officers will be voted upon at the April 26th National Directors Meeting:

Chairman of the Board — HOMER E. LUNKEN

President — PHIL CARROLL

1st Vice President — DAUSE L. BIBBY

2nd Vice President — JAMES E. NEWSOME

Secretary — HUGO W. DRUEHL

Treasurer — FRED E. HARRELL

Chairman of the Board
HOMER E. LUNKEN
Cincinnati Chapter

Mr. Lunken has been one of the most active members of the S.A.M Cincinnati Chapter, since 1944. He has held various offices with that chapter, and has been vice president of S.A.M Central Region. He is Vice President and Director of the Lunkenheimer Company of Cincinnati.

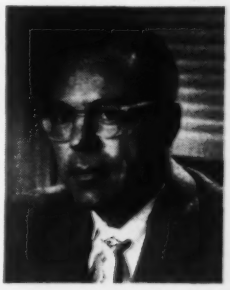
Mr. Newsome is Past National Secretary, National Director, President and Executive Vice President of the S.A.M Chicago Chapter, and has been active in the Society since 1948. He is Production Manager of Filter Products Division of Johnson & Johnson, Chicago, and was formerly with Continental Can Company and the U. S. Steel Corporation.

2nd Vice President
JAMES E. NEWSOME
Chicago Chapter

President
PHIL CARROLL
N. New Jersey Chapter

Phil Carroll served in the Signal Corps during World War I, then entered Westinghouse as a student engineer, working in timestudy in three of that company's plants. He has served S.A.M in many offices as a member of the Northern New Jersey Chapter. Mr. Carroll is the author of several books on Time Study and Cost Control.

Mr. Druehl is President of Arrowhead and Puritas Waters, Inc., Los Angeles. From 1934 to 1942 he served with the Farm Credit Administration in Washington, and with the U. S. Army from 1942 to 1946, when he went to the Pacific Public Service Company in San Francisco.

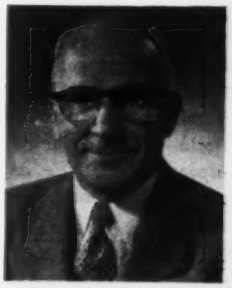


Secretary
HUGO W. DRUEHL
Los Angeles Chapter

1st Vice President
DAUSE L. BIBBY
Binghamton Chapter

Mr. Bibby is a member of the Binghamton Chapter who has been active in the Society since 1952. He is Executive Vice President of Daystrom Inc., of Elizabeth, New Jersey. He was formerly a Vice President of International Business Machines of New York. Mr. Bibby is one of the founders of the Binghamton Chapter, and is a past National Secretary of S.A.M.

Mr. Harrell has been General Manager of the Curtiss-Wright Corporation's Marquette Division since February 1955. He was Vice President of Reliance Electric & Engineering Company from 1945 to 1954, moving up through Sales Engineer (1924-27), Assistant Chief Engineer, and Chief Engineer (1927-45) with that company.



Treasurer
FRED E. HARRELL
Cleveland Chapter

It is probable that Taylor from the point of view of the mid-twentieth century, was somewhat 'naive' about "the ideals and objectives of the labour movement". The labour movement in the United States was somewhat naive itself at the turn of the century. It was composed almost exclusively of craft unions, comparatively select groups of skilled workers who covered up their aim of creating a privileged position for themselves by windy rodomontade about democracy, fraternity and liberty. Nadworny himself is quite clear on this point: *"the craft base on which Gompers and his aides had built the federation (the A.F.L.) still depended upon the power of "the secrets of the craft", which were to be imparted to a limited number of apprentices for the propagation of the know-how of the craft. In this manner, work skills could bring high financial rewards, and a strong shop bargaining position."* (pp. 52, 53)

UNQUESTIONABLY this kind of an attempt to create monopoly in certain classes of labour would have fallen foul of some of Taylor's basic ideas if he had considered the matter deeply. It would have outraged his sense of social responsibility. He thought that productivity was important to the community. And this type of craft unionism reduces productivity in more ways than one. Apart from its tendency to restrict output directly, it is very apt also to include in its "craft" quite a large percentage of operations which are semi-skilled or even unskilled. A man with 5 or 7 years' apprenticeship behind him may spend 90% of his time on processes which could be done equally well by someone with 6, or even 3, months' training.

It is also apt to lead to demarcation disputes and the kind of ridiculous waste which accrues when an electrician has to be sent on a job for half-a-day because there is one terminal to be fixed, an operation which every man in the plant down would do for himself in his own home without giving it a second thought.

But, in fact, as Nadworny himself observes: *"prior to* 1911 *Taylor had few occasions to write about or discuss the subject of trade unions in detail."* (p. 22) He tries to damp down Taylor's claim that there had never been a strike under scientific management by observing that *"union men did leave every plant where Taylor was employed"* and that *"Emerson's methods* (and incidentally, Taylor's) *precipitated a strike at the American Locomotive Company."* (p. 23)

No doubt union men, and non-union men, did leave every plant where Taylor was employed. There is always a certain labour turnover at almost any plant. Emerson's methods were neither directly nor indirectly Taylor's. Emerson persisted with his attempt to introduce time-study in the American Locomotive Company's plant at Pittsburgh which led to a strike of the machinists in 1908 despite Taylor's direct advice to the contrary. Taylor knew that the management had not accepted his philosophy. In these circumstances, to describe Emerson's methods as "incidentally Taylor's" is a distortion of the truth.

It was precisely in order to avoid "incidents" of this description which would bring the idea of scientific management into disrepute that Taylor always insisted that no installation should be attempted without the presence of an "expert" in the subject. But Nadworny twists even this reasonable precaution into an allegation that Taylor was not being entirely honest with himself: *"Nevertheless, Taylor was not completely convinced that the promise of higher wages, by itself, would really invoke harmony. He feared that unless a scientific management "expert" (one whom he should designate as such) introduced the system, it was highly probable that the undertaking would result in "strikes and labour troubles". (p. 21)*

Taylor never pretended for a moment that high wages by themselves would reconcile workers to the change involved, and particularly to the stop-watch. What he said was that they are *"in time reconciled to time study . . . when they appreciate that the ultimate outcome of it means higher wages for them selves." (p. 21)*

As to Taylor's ideas being *"in direct contrast to the ideals and objectives of the labour movement"* that depends on how those ideals and objectives are conceived. If they are the material and moral well-being of those who work in industry, the elimination of arbitrariness from relations between those who work and those who manage, raising the standard of living of all categories of citizens, giving to each individual the fullest opportunity for "life, liberty and the pursuit of happiness" which he or she is capable of using, then Taylor's ideals and those of the labour movement were identical.

All evidence suggests that Taylor gave very little thought to the trade union movement as a whole, to the general structure of its ideology or to the impact of his philosophy of management upon it, until he was forced to do so in 1911. He took the practical steps which seemed to him necessary to avoid conflicts with organized labour where he was actually installing scientific management. On the whole, those steps proved successful. Personally, he was an enegetic but an accessible manager. His policy of trying constantly to upgrade less skilled workers was incompatible with a refusal to listen. He was alert for any evidence that a worker was trying to co-operate by making suggestions about the work. In his testimony to the Select Committee he emphasized the degree to which workers contributed to improvements in scientifically managed shops.[19] But his interest in the matter was limited to these practical considerations.

Nadworny tries to bolster his charge that Taylor was anti-Trade Unionism with a little heavy sarcasm, supported by a quotation wrenched from context: *"For the workmen, co-operation meant 'to do what they are told to do promptly and without asking questions or making suggestions'. The 'co-operative' role of management was therefore an active one, while that of the worker was of the passive kind —he had merely to obey the 'laws'."* (p. 9)

THE quotation 'to do what they are told to do promptly, etc.' are Taylor's words. They are from a lecture he delivered to young engineering graduates on *Why Manufacturers Dislike College Students.*[20] The phrase had no reference whatever to the workers or to Taylor's attitude towards them.

Indeed, the whole picture of Taylor's ideas as it were challenging the unions over a long period of years is palpably false and is built up by devices of this kind. The author refers several times to the emphasis which Taylor laid on dealing with workers as individuals: (p. 5)

> *"He claimed that his method of payment "renders labour unions and strikes unnecessary". The workers, dealt with individually and not "herded" into groups, would be better able to pursue their own individual ambitions. To Taylor, the practice of collective bargaining—"conference and agreement"—was "vastly inferior" to his own plan of "stimulating each workman's ambition by paying him according to his individual worth, and without limiting him to the rate of work or pay of the average of his class"."*

No references are given for Taylor's phrases used in making up this statement. It is, therefore, impossible to show in what context they were employed. But two facts emerge which throw doubt on the whole paragraph:

a) Taylor never in his life claimed that a method of payment *by itself* rendered *"labour unions and strikes unnecessary"*; it was contrary to his whole philosophy. Workers strike for many other reasons besides wage rates. What he did claim was that scientific management, properly applied, including the philosophy embodied in his two basic conditions, would very much reduce the incidence of strikes. Indeed, the author himself admits as much on the same page: *"Taylor suggested that the wage incentive was but a 'partial step' towards these ends (increased output and reduced cost)" (p. 5)*

b) The reader would imagine that Taylor had used the phrase '"herded" into groups' in connection with Trade Unions. This is not so. Taylor used the word of the practice of *management* in dealing with the yard labour at the Bethlehem Steel Works. He commented that the men were *herded* into gangs, instead of the tasks assigned to them being studied individually and suitable individuals being assigned to each task.[21]

On this general question Taylor's repeated emphasis on the point that there is an obligation on management to study each person as an individual, and to deal with him as an individual, not merely as an anonymous member of a gang or an impersonal number, cannot possibly be twisted into an attack on trade unionism. It is a standard precept of good modern personnel management whether a plant is scientifically managed or not.

What Nadworny appears to be seeking is some justification in Taylor's opinions or conduct for the extravagant attacks made upon him by the American Federation of Labour in 1911.

Did The Trade Unions Attack Taylor?

What actually appears to have happened was that the unions as a whole paid very little attention to scientific management prior to 1911. Then, late in 1910 and in January 1911, the Eastern Rates case and Brandeis' use of scientific management as a stick with which to beat the railways suddenly directed a flood of publicity onto the ideas of Taylor and others. Taylor is represented as "*delighted with these developments,*" *(p. 39)* on the ground that he "*expressed his gratitude to Brandeis, in a number of letters written during Jan.* 1911." The references to these letters are not given. The facts are:

a) that Taylor was not present at the meeting at which the title "scientific management" was decided on and, though he subsequently accepted it as a generic description of his ideas, he remained dubious on the point.[22]

b) that he did not give evidence in the case and that in other correspondence he expressed doubt as to whether this sudden popular interest and the "efficiency" craze which resulted would not do harm to the development of genuinely scientific work.[23]

The statement that Taylor was "delighted" is therefore open to question. He may well have expressed his gratitude to Brandeis, whose conduct of the case was certainly calculated to call the maximum public attention to what "scientific management" engineers had been thinking and doing. Not only were railway employers and managers, and Wall Street which supported them, incensed by Brandeis' attack. The railway brotherhoods were equally alarmed at the suggestion, which came from Harrington Emerson, that the railways could save a million dollars a day. Gompers, leader of the A.F.L., in which the railway brotherhoods were an important element, came to the conclusion that the time had come to launch an all-out political attack against the whole idea of scientific management. If savings of this order of magnitude were possible they could only be realized by driving the workers harder. The idea that improved methods of doing the tasks involved in different operations could be devised which would make the work actually easier — even though startling increases were secured in the volume of output—could not be allowed to intrude. After all, most of the unionized workers were skilled craftsmen with years of "experience" of their trades. They were, according to their own ideas, already doing a "good day's work". It was intolerable that a few engineers should pit their strange "scientific" measurements against this accumulated weight of know-how.

Taylor, as the best-known protagonist of the scientific management movement, became the main target for this onslaught. It was conducted with an extravagance of statement which was pardonable in view of the general bitterness which pervaded employer-trade union relations in the U.S.A. at that period.[24] But to Taylor's precise and objective mind it must have seemed what was once described as "a moonbeam from the larger lunacy".[25] One extract from a report by a Committee of the A.F.L. issued in 1913 read:

> *"the inhuman and hideous so-called Taylor system of scientific management. . . . . A more diabolical scheme for the reduction of the human being to the condition of a mere machine was never conceived by human brain. No tyrant, nor slave-driver in the ecstasy of his most delirious dream ever sought to place upon abject slaves a condition more repugnant to commonly accepted notions of freedom of action or liberty of person than is comprehended by the Taylor system."*[26]

Thus attacked, it hardly surprising if Taylor reacted sharply. His whole thinking about scientific management had derived from his almost exaggerated sense of social responsibility. He had devoted his life to trying to find a "way out", an alternative to the hopeless and distasteful prospect of an ever-developing conflict between managers and organized workers.

In "scientific management" he felt that he had found a "way out". To him management had become increasingly a technical, a scientific job; as technical and scientific as the job of navigating a ship. He felt that a correct output which would not put an unreasonable strain upon workers could be determined as accurately and objectively as a ship's officer could "fix" its position by using a sextant and chronometer. And because this process of measurement was objective and open, this particular cause of conflict would be drained away from the relations between employers and employed. Both parties could see the calculations, could satisfy themselves as to their accuracy and impartiality. They would no longer be matters of "political" argument. The suggestion of "joint consultation" on this particular issue seemed to him absurd . . . as absurd as a suggestion that the captain of a ship at sea should be required to call a committee of the crew together every time he had to change course.

Taylor was a man with a social ideal—an idea he believed would be of immense benefit to the workers. He was *not* trying to make money or reputation for himself. The money he made was primarily out of his invention of high-speed steel under the Taylor-White process. He had given up making money even out of installing scientific management professionally. He was devoting his time, much labour in the declining years of his life and a large proportion of his private income to propaganda for the idea of scientific management, because he believed it to be in the interest of the whole community, but especially in the interests of the workers. And this "dedication" was met by a storm of calumny.

The CENTRAL REGION of the Society for Advancement of Management

presents the

2nd Annual MANAGEMENT CONFERENCE

Thursday & Friday • May 1-2, 1958
Hotel Alms • Victory Parkway
Cincinnati, Ohio

SCIENTIFIC TOOLS FOR MANAGEMENT . . .
- In Business — Large and Small
- For Line and Staff
- For All Echelons of Supervision and Management

OUTSTANDING SPEAKERS AND DISCUSSION LEADERS IN THESE AREAS . . .
- Human Engineering
- Communications Research
- Use of Computers
- Motivation Research
- Automation
- Operations Research

The CINCINNATI CHAPTER is proud to be your host for this regional conference and cordially solicits you to attend. Your support in person is needed to promote the ideals of the S.A.M. Registration Form and Program on request to:

James F. Martin
Regional Conference Program Chairman
Xavier University
Cincinnati 7, Ohio

PARTICIPATING AND SPONSORING CHAPTERS:
Athens • Cincinnati • Cleveland • Columbus
Dayton • Indianapolis • Xavier University

Was Taylor "Dishonest" In His Evidence Before The Select Committee?

It is Nadworny's repeated attempts, throughout the book, to throw doubt on Taylor's integrity which constitute its most glaring defect. A number of instances of quotation out of context and similar devices have already been given. There is the subtle use of adverbs where they will tend to discredit the victim. Wherever it is possible to give a twist to a sentence which suggests that Taylor was less honest and more self-seeking than he should have been, the twist is inserted. This kind of innuendo is difficult to combat. But, where there are definite allegations of dishonesty and the source is quoted the task is somewhat easier.

Writing of Taylor's testimony before the Committee appointed by the House of Representatives in 1912, Nadworny quotes his passage about the "mental revolution" required on both sides before scientific management can be said to exist.[29] He then continues:

He thought his "mental revolution" argument a means of preventing censure of scientific management for whatever abuses might result from it. What his statement implied was that scientific management could not possibly be harmful or abusive; if conditions became oppressive, it simply was not scientific management! (" . . . as soon as one side jumps the fence and bulldozes the other it ceases to exist"). It was one of the most quoted statements Taylor ever made, but it was not an honest one, as *shown by a trio of like letters he sent out on Feb. 2nd. concerning "this most essential part" of his testimony. "I found the use of this element," he wrote to Naval Constructor D. W. Taylor, "of the greatest benefit in heading off Chairman Wilson in his endeavour to get on the record the fact that managers were at any time likely to abuse the power which they had under scientific management, and so make it a great injury to the workmen." " (pp. 62, 63) The other two letters are not quoted.*

What Nadworny fails to remark is that Taylor had dealt with this question quite fully and frankly on the first afternoon of the hearing six days before. What he had said was:

"Many elements of what may be called the mechanism of scientific management are powerful when used by those on the management's side. These elements are powerful both for good and for bad, and it is impossible to be assured that even useful elements shall always be used in the right way. So that, in a number of cases, men who were out of sympathy with scientific management and yet who were using the elements which have been in the eyes of the public associated with scientific management have brought on strikes by using these elements entirely without relation to the real, fundamental and essential principles of scientific management."[30]

The Chairman reverted to this evidence at the penultimate session of the hearings, when Taylor had been in the witness chair for more than 2½ days, with the words: *"The other day, Mr. Taylor, you made the statement that the mechanism of scientific management was a power for good and a power for bad."*

Taylor: "Yes, Sir."

The Chairman then pointed out that since the employer was in a powerful position there was nothing to ensure that the "laws" of scientific management would be observed. His "key" question reads: *"If the whole proposition of whether scientific management shall be used for good or shall be used for bad depends upon the single directing head of the establishment, there is not much likelihood, is there, of any penalty being attached to the exercise of that power for bad?"* (31) The wording of this question omitted the essential phrase "the mechanism of" which had formed part of Taylor's original statement.

Taylor replied: *"I have never said that scientific management could be used for bad. It is possible to use the mechanism of scientific management, but not scientific management itself. It ceases to be scientific management the moment it is used for bad."* (31)

Asked how the worker was going to protect himself against abuses of *"that mechanism that has been established to oppress him?"* Taylor replied that the worker would then cease to co-operate, and begin to "soldier" again.[31]

The cross-examination was hostile in tone and temper. The members of the Committee were unable then, as is Nadworny today, to appreciate Taylor's point that unless the mechanisms of management which he had developed were used with a real desire to secure the co-operation of the workers, a sensitiveness to morale, they were not scientific management as he had used the phrase. Yet, it is a simple enough point. Taylor was in the position of a surgeon who had invented a new instrument or of a physician who has developed a new treatment. He was being attacked on the ground that the instrument or the treatment might conceivably be dangerous if it fell into the hands of someone who wished to commit murder. "Of course," he replied, "but committing murder has nothing to do with the art of medicine."

To say that he was not "honest" because he tried to prevent the Committee from tricking him into a verbal admission that scientific management (medicine) itself, apart from the mechanisms (instruments and treatments) it might develop, could be used to oppress the workers, is nonsense. His statement was no more "dishonest" than to point out to a person who is "shouting the odds" about doctors that he need not go to one.

S.A.M Chattanooga Chapter Receives Charter

The presentation of a charter to the new Chattanooga, Tennessee, chapter of the Society for Advancement of Management was made recently at a dinner in that city. **A. Cave Richardson,** National Director of the new chapter, accepted the charter from **Hezz Stringfield,** S.A.M Southeastern Region Vice President. Participating in the presentation ceremony were (left to right above) **John B. Joynt,** vice president of New York Central Railroad and principal speaker at the charter dinner; **Hezz Stringfield, Mr. Richardson** and **Forrest Tugman,** the new chapter's President.

Taylor, when operating as a consultant, may have maintained a certain detachment from the individual problems raised by readjustment and consequent lay-offs. Such problems were rather the employer's responsibility than his. But it certainly does not justify the author's notes that *"Taylor was callously indifferent to lay-offs, and believed that these were serious for workmen only during depressions, (p. 165. N.71)* and *"Taylor did not consider quitting a drastic step, for he maintained that anyone who was willing to work could get a job." (p. 165, N.62)* Taylor had expressed an opinion as to the comparative ease with which a good worker could secure employment, but it does not contain the faintest shred of evidence to support the charge that he had no human sympathy with the man or men laid off.

It is an unfounded accusation which comes with some impropriety from an author who seems to write with satisfaction of the deplorable manner in which Taylor himself was laid off by the Bethlehem Steel Works in 1897.[33] Taylor was put into Bethlehem by Joseph Wharton, the Chairman, without any understanding with Linderman, the President, as to his terms of reference and authority. Taylor did three years' work there during which he secured world-wide fame for Bethlehem as the joint inventor, with J. Mannsel White, of "high-speed steel". Bethlehem bought the patents. Taylor was then dismissed in a two-line letter from Linderman, the President, which gave him a bare two weeks' notice and made no mention of his immense services to the corporation. Wharton apparently concurring. Nadworny licks his lips over this incident. He quotes Linderman's curt and discourteous letter in full with the observation that it was "hardly touching". (p. 11) In a note he reproduces John dos Passos' comment on it from a novel, *The Big Money*, written 37 years' later, with the introduction *"John dos Passos pointedly and sarcastically described the event thus."* (p.156 N.29) John dos Passos was 5 years old at the time of the event which he "described"!

What Was Taylor Really Saying?

The real issue raised by this book is one of great moment for the future of an industrial civilization. Nadworny, in his concluding chapter, writes nostalgically of scientific management as though it was already something dead and buried. *"Even words and phrases like "Taylor" and "scientific management", so dear to the Taylorites fell into disuse by the end of the thirties."* (p. 152) *"It was no longer possible to identify a "scientific management movement" in the same terms by which it had been defined for some thirty years."* (p. 152)

In the narrower sense, this is undoubtedly true. The Taylor Society has been absorbed into The Society for Advancement of Management, which speaks with a somewhat broader accent than its predecessor. Most of Taylor's contemporaries—the ardent disciples who came under his personal influence and, after his death, showed some disposition to found a priesthood—have themselves passed on. There has been a second World War.

Insofar as the kind of attitude to Taylor's work identifiable immediately after his death has changed, Nadworny is correct in his diagnosis. The world is forty years older. But he is wrong in writing of scientific management in the past tense. He himself admits that it *"decisively shaped the course and development of industrial management programs and also exerted a direct influence on the evolution of American trade union policies". (p. 154)* An idea, a group of ideas, which had the power to do those two things, are not finished with because this or that organization which was associated with their originator falls into different hands or speaks with a changed accent. Ideas which are really original have a vitality of their own, quite apart from the individuals or the institutions through which at any time they may, temporarily, find expression.

It was left to Frederick Winslow Taylor, neither philosopher nor economist, but a man with little time for theoretical research or verbal formulation—a practical and practising engineer—to "take thought how best to conduct industrial affairs and the distribution of livelihood in consonance with the technical requirements of the machine industry." To that one man the United States owe a large, if incalculable, proportion of their immense productivity and high standard of living to-day.

Certainly his solution, as stated, was over-simplified: he did not work out all its implications: he had other preoccupations. But in the two simple conditions which he propounded as the basis of scientific management lies the "key" to the problem of the conflict between man's interests as a producer and as a consumer which has hag-ridden the industrialized nations ever since the industrial revolution and is responsible for the world-wide tendency to inflation which harasses every industrialized country to-day.

Possibly it is the profound simplicity of Taylor's two underlying conditions which has prevented the world from understanding how comprehensive they are, or from realizing that all the methodologies which he developed by applying the second of them were to him just "water over the dam". The methods would be improved upon, would pass. The fundamental issue was the attitude of mind which had made them possible, the application to every variety of industrial problem of the detachment, the way of thinking, the intellectual integrity which are the hall-marks of sound scientific work. Taylor did not imagine that he had all the answers. It may, it probably will be, centuries before the world has all the answers. But in the meanwhile he has suggested a formula with which industrial man may labour hopefully and constructively towards those final answers. It has two parts:

First, the recognition that business, any business, is a system of human co-operation. It is essential to its success that all those engaged in it, whatever their function, should work *together*. To do this they must have a common objective, a single aim. Taylor defined that aim as "increasing the size of the surplus". He did not say how that surplus should be divided, He merely suggested that if, in any business, *all* would concentrate on increasing it there would be so much more to divide that the problem of the share-out would sink to insignificant proportions.

THIS idea of working *together* also carried the implication that all conduct likely to disturb the relations between members of the team was to be eliminated. Since, under Taylor's second condition, how much each worker ought to do would be determined objectively and under his first condition it is assumed that each worker is doing his utmost to collaborate in a joint effort, the necessity for managers and supervisors to be authoritarian would largely disappear. It could be assumed that each worker was doing his or her best and the task of supervision would become predominantly one of instruction, guidance and help. He stressed repeatedly throughout his Testimony the friendly relations that did exist in many scientifically managed plants between managers and operators and that the cultivation of such relations was an integral feature of management's responsibility where scientific management is attempted.

Second, that since men working together for the same end can and do disagree as to means, everyone concerned in any business enterprise should start by agreeing on a common method of thinking, an intellectual criterion to which differences as to means could be referred and through which they might be resolved. He suggested the method of thinking which by its extremely rapid development of control over material things had created the very social problem with which he was attempting to deal—the conflict between managers and workers. He suggested that men should stop asking themselves who was right? and begin to deal with their differences by asking what was right? He wished to bring to bear on the issues which frequently generate so much more heat than light some of the detached analysis, the the use of definition and measurement, the impartial experiment which over the past four centuries have enabled physical scientists to solve so many of the problems of inanimate matter. He wished owners and managers to be just as much bound by the results of such

dispassionate investigation as he hoped workers would be.

Of course these two conditions involve a complete reversal of many people's customary thinking about such problems, of course they challenge vested interests on both sides of the industrial fence, just as atomic weapons are challenging the vested interests of conventional combat forces today. Taylor saw that clearly. It was why he used the phrase "a mental revolution". Mental revolutions are not detonated by pressing a button. But once they have started there is no stopping them.

Was Taylor Lacking in Integrity?

The man whose thinking made that new note possible, who precipitated "the mental", and moral, "revolution" on which it is based and out of which it has developed, was Frederick Winslow Taylor.

It is therefore a matter of more than individual importance—something greater than one man's reputation hangs on the issue—to determine whether Taylor himself was sincere, whether, in promoting the idea that a more scientific attitude towards management was possible and desirable, he displayed the intellectural integrity which is characteristic of scientific work of a high order and the moral integrity which sets the interests of the community above self, class or faction.

It is the writer's personal conviction—and he shares with Mr Nadworny the handicap of not having known Taylor personally—that Taylor was a very great American, in the Puritan tradition. He belonged to that group of human beings in whom Cromwell delighted, "men who make some conscience of what they do". Such men may be "misguided, difficult, awkward", exposed to all the petty epithets of political controversy, but integrity is *not* a quality in which they are lacking.

The ideas which Taylor germinated are likely to seem of increasing importance to mankind as the perspective from which they are viewed lengthens. While "management" is sometimes associated with the particular economic theory current in Taylor's time, it is a subject of great importance whatever the particular ideology under which the industry of any country is controlled. It is a field of human knowledge which is ultimately wider and of greater importance than either capitalism, socialism or communism, Employers' Associations or Trade Unions.

Because Taylor was the initiator and originator of that new branch of knowledge, because he added this vital brick to the edifice of man's social heritage, he "belongs to the ages." The ideologies will pass: knowledge will remain. The author has the grace to observe "for the industrial world, Taylor's death . . . marked the passing of a giant." (p. 86) He has tried to play David to this Goliath. ■

FOOTNOTES

[1] *Milton J. Nadworny* — Scientific Management and the Unions—1900-1932. *A Historical Analysis, Cambridge, Mass., Harvard University Press* 1955. *Page references in brackets in the text are to this publication.*

[2] *Unless otherwise stated, all reference to Taylor are to the collected edition of his two books* (Shop Management *and* The Principles of Scientific Management) *and of his* Testimony *before the Special Committee appointed by the House of Representatives in* 1912, *published by Harper and Bros., New York,* 1947 *under the generic title* Scientific Management. *Since the three parts of this volume are paged separately, the title of the section, viz. Shop Management, Principles or Testimony, is given. Taylor, Op. Cit.,* Shop Management, *p.* 63.

[3] *Ibid., p.* 60.

[4] *Cf. "Our confusion of terminology makes it difficult to speak accurately to one another within any one field, let alone across fields and across cultures." Edward H. Litchfield "Notes on a General Theory of Administrative Testing",* Administrative Science Quarterly, *V.i. No.* 1 *June* 1956, *p.* 6.

[5] The Shorter Oxford Dictionary, *Oxford, The Clarendon Press* 1933, *V.ii.,* p. 1806.

[6] *Taylor, op. cit.* Principles, *p.* 36.

[7] *Taylor, op. cit.* Testimony, *pp.* 41, 42.

[8] *Cf. Taylor, op. cit.* Shop Management, *pp.* 62, 129, 132, 135. Principles, *pp.* 101, 131, 133. Testimony, *p.* 253.

[9] *Taylor, op. cit.* Shop Management, *p.* 137.

[10] *F. W. Taylor*—A Piece Rate System and Notes on Belting, *London, Routledge & Co., Ltd.,* 1919, *from the Introduction by F. B. Copley.*

[11] *Taylor, op. cit.* Shop Management, pp. 142 & 3.

[12] *Taylor, op. cit.* Testimony, *p.* 26.

[13] *Taylor, op. cit.,* Testimony, *pp.* 29, 30.

[14] *Taylor, op. cit.* Testimony, *p.* 31.

[15] *Taylor, op. cit.* Testimony, *p.* 30.

[16] *Cf. "At the first glance we see only two parties to the transaction, the workmen and their employers. We overlook the third great party, the whole people—the consumers who buy the products of the other two and who ultimately pay both the wages of the workmen and the profits of the employers. The rights of the people are therefore greater than those of either the employer of the employé." Taylor, op. cit.* Principles, *p.* 136.

[17] *Cf. "The same mechanism which will produce the finest results when made to serve the underlying principles of scientific management, will lead to failure and disaster if accompanied by the wrong spirit in those who are using it. Hundreds of people have already mistaken the mechanism of this system for its essence." Taylor, op. cit.* Principles, *p.* 129.

[18] *v. Taylor, op. cit.* Testimony, *pp.* 79-86 *for a full account of these incidents.*

[19] *Taylor, op. cit.* Testimony, *p.* 196.

[20] *Frederick W. Taylor, "Why Manufacturers Dislike College Students",* Proceedings of the Society for the Promotion of Engineering Education, 1909, 17:87.

[21] *Taylor, op. cit.* Principles, *pp.* 72, 73. Shop Management, *p.* 186. *The latter reference reads "When employers herd their men together in classes" . . . etc.*

[22] *Frank B. Copley,* Frederick W. Taylor, The Father of Scientific Management, *New York, Harper & Bros.* 1923. *V.ii., p.* 372.

[23] *Ibid. V.ii., pp.* 386-9.

[24] *The writer can recall listening with mingled amusement and distaste, as late as* 1918, *to an American major drawn from the National Guard describing his previous military (sic) experience while at dinner with a British Headquarters. They had occurred when he was called out on strike duty. His lurid stories of shootings, beatings and teargas struck a British audience, drawn from a country with more sophistication in employer-trade relations, whose government had just issued the Whitley Report, as somewhat primitive.*

[25] *Stephen Leacock.*

[26] *Report of Proceedings, Thirty-third Annual Convention of the American Federation of Labour, Seattle, Washington, Nov.* 10-22, 1913. *p.* 299: *The report of the Committee was adopted by unanimous vote.*

[27] *Cf. (i) "There is no earthly reason, if it is desired by the workmen, why there should not be a joint commission of workmen and employers to set these tasks, not the slightest earthly reason."* (*pp.* 144, 145)

(ii) "In many establishments under the ordinary system (of management) collective bargaining has become and is in my judgment an absolute necessity." (*p.* 150)

(iii) "There is no reason on earth why there should not be a collective bargaining under scientific management just as under the older type, if the men want it." (*p.* 151)

(iv) "Do not understand for a minute, Mr. Chairman, that I am opposed to trade unions. You have never heard me say it. I am in favour of them. They have done a great amount of good in this country and in England." (*p.* 183) *Taylor, op. cit.* Testimony.

[28] *Some years ago there was a dispute at a British plant between the Trade Union concerned and the management. The workers' representatives claimed that a consultant employed by the management had set a certain rate too "tight". In order to avoid a deadlock one of the Trade Union representatives suggested that the writer's firm should be asked to look at the situation and indicated that the workers would accept their ruling. It emerged on investigation that the rate as set by the original consultant was accurate. But the manager of the department concerned had made a slight change in procedure after the rate was set, which, though he was quite unaware of the fact, created a difficulty in that particular process not allowed for in the original schedule of operations. The difficulty was removed, the rate remained and everyone was satisfied. This is a good example of the inadequacy of negotiation unsupported by technical "know-how" to solve matters which may well lead to dispute between employers and employed.*

[29] *Vide Note* 12.

[30] *Taylor, op. cit.* Testimony, *p.* 34.

[31] *Taylor, op. cit.* Testimony,*pp.* 188 & 191-2.

[32] *Vide Copley, op. cit. ii. pp.* 8-155 *for a full account of what passed at Bethlehem. Cf. also "How often do we hear it said of a business institutions that their organizations are all 'shot through' with politics. . . . Such conditions when they exist . . . are really due to inattention on the part of the management to the necessities of formal organization, and the application of its principles. . . . The management that is inattentive to the definition of subordinate functions is almost sure to be just as disorderly in the exercise of its own." J. D. Mooney and A. C. Reiley,* Onward Industry, *New York, Harper & Bros.* 1931, *p.* 56.

[33] *Peter F. Drucker,* The Practice of Management, *New York, Harper & Bros.* 1954. *pp.* 392, *and pp.* 147, 157 & 8, 196, 345, 348 & 9, 370, 378.

[34] *Ralph J. Cordiner,* New Frontiers for Professional Managers, *McKinsey Foundation Lecture Series sponsored by the Graduate School of Business, Columbia University, New York, McGraw Hill Book Co.,* 1956, *pp.* 15 & 16.

Wallace Clark's Contributions To International Management

by Harold F. Smiddy

Vice President,
Management Consultant Services
General Electric Company
New York City

As one privileged to work with Wallace Clark in various activities of the Association of Consulting Management Engineers, to whose progress he long gave so much of his great wisdom, I can only wonder a little with you what thoughts and guidance he might be offering us in these current days of such hectic and confusing developments on our international stage.

Above all, I know he would be calm. And this, I urge, is highly appropriate when so many national and international leaders right now seem noisily and wishfully to be expecting quick panaceas for international problems and situations, where the essence of progress has to come instead from orderly, persistent, long-cycle thinking, development and stick-to-it-iveness.

It is in just such swiftly shifting situations that Wallace Clark would be telling us—when some spectacular immediate event brings shrill yells for frantic reversal of basic policies that have taken a decade for formulation—that neither scientific nor political progress on the international front, economic or military, can be achieved by such pin-wheel-like gyrations. The calm, deliberate thought and positive step-by-step action which he so typified to all who knew him was never more needed than now in 1958.

Nor would realization of Russian concentration and diligence in applying common scientific knowledge to attain major new technological gains in devastating current and potential military weapons, cause Wallace Clark to pay much attention to today's spate of half-baked proposals (from far too many quarters) that we drop the balanced, over-all drive which has prevented Hot War—and which the President solemnly assures us is still doing so—to rush madly into either technical or organizational shuffles that would stop or slow present progress, rather than produce better early substitute advances. This is indeed a time to realize, as Eugene Zuckert put it recently, that:

"The war in which we are engaged today cannot be waged on a 'minute man' psychology".

Most of you have, I am sure, read Pearl Clark's little book, the *Challenge of the American Know-How.* If you perused it carefully you will recall that it has embedded within it the Foreword and the Conclusion of a comprehensive "Biography of Experience" of the work Wallace and Pearl together had accomplished in the field of Management Engineering, at the international echelon, up to the time they left Paris to come back to New York at the outbreak of World War II.

Now that was a day when not one but several totalitarian regimes had passed from threats to savage reality in implementing their twisted dreams of conquest of the World. Unlike today, the guns, and not simply the propaganda and subversive financial sorties, were roaring. Lamentations, on the one hand, and hastily distilled elixirs, on the other hand, were pouring forth in about the same volume—and lack of depth—as right now.

Again, the Clarks held to the saner, calmer tone. The "Conclusion" of that "book-within-a-book" still offers sound counsel to us here in the pulsating international whirl of 1958. In it they said:

"This experience has deepened the conviction that scientific planning, which is democratic in purpose, methods and control, can evoke and direct dynamic forces which are invincible and can realize in the most practical, workmanlike manner the greatest measure of prosperity and security . . . .

"In any conflict between planning which is autocratic and that which is democratic, whether in industry or in war, there is a testing time when democracy seems slow, awkward, bogged down in costly mistakes, while autocracy seems to sweep invincibly ahead.

"Then the intangibles come into play — the forces that are in people who have come up through the democratic process—and there is no question where victory lies."

Is not that sort of serene confidence more our need today than shrill recriminations, political jockeying and columnist technology?

Let me quote once more from the Clarks,

(Remarks by Mr. Smiddy made on the occasion of his acceptance of the Wallace Clark Medal at the 1958 Annual Dinner of the Council for International Progress in Management)

this time Pearl's own words in her book, and I am utterly certain as she sits here with us tonight that she joins me in reaffirming them, because their truth is timeless. As she put it:

"Now I was writing a Conclusion of my own—or rather it was writing itself. . . .

"What I had been witnessing during these years in other countries was the contrast between two opposite ways of thinking about people. One autocratic, totalitarian, from the top down, imposed its will upon people; used people, regardless of their rights to build up power at the top and keep it there. Power was what mattered. Its methods were secrecy, fear, false promises, injustice. People's thinking must be dictated.

"The opposite way was democratic. It did not require any Gestapo or OGPU. It controlled planning for people, *not people for planning; freed people from old conditions that were holding them back; removed obstacles to their best accomplishment. What mattered, because this was practical, was the greater opportunity, security and voluntary cooperation of the individual . . . .*

"In the old way, I could see no hope. It had been tried too often and found wanting. It always ended in wars, then rejuggling of powers and authorities, then the same miseries and uncertainty for people.

"In the new-world way of helping people to help themselves, wherever they were, out of their own resources and patterns, was the answer for which men's minds and hearts had been searching always."

Now before you say that was 1948, that was pre-missiles with nuclear warheads, pre-sputnick and pre-Khrushchev, let me read you the 1957 conclusion of quite a different observer of the Russian, the European and the World scene. The final paragraphs of one of the most penetrating, poignant and powerful books of our day, say this:

"To the extent that one class, party, or leader stifles criticism completely, or holds absolute power, it or he inevitably falls into an unrealistic, egotistical and pretentious judgment of reality.

"This is happening today to the Communist leaders. They do not control their deeds but are forced into them by reality. There are advantages in this; they are now more practical men than they used to be. However, there are also disadvantages, because these leaders basically lack realistic, or even approximately realistic, views. They spend more time defending themselves from world reality and attacking it than they do getting used to it.

"Their adherence to obsolete dogma incites them to senseless actions, from which, on more mature thoughts, they constantly retreat, but with bloody heads. Let us hope that the latter will prevail with them. Certainly, if the Communists interpreted the world realistically they might lose, but they would gain as human beings, as part of the human race.

"In any case, the world will change and will go in the direction in which it has been moving and must go on—toward greater unity, progress, and freedom. The power of reality and the power of life have always been stronger than any kind of brutal force and more real than any theory."

The author, of course, was Milovan Djilas, Vice President of Yugoslavia, coleader with Tito of the second most powerful Communist country in Europe; and he released the text while still in prison on one sentence and was handed seven additional years of "rigorous imprisonment" for having done so.

If you have *not* read the whole of his book, *The New Class*, let me urge that you do so before concluding that our powerful, brilliantly directed Strategic Air Command, backed by all the other tremendous resources of our own Armed Services, of NATO and of other allies, are the *only* deterrent to catastrophe in the present ugly World tensions.

Yes, in appraising the Free World's strengths, let us count those behind the Iron and Bamboo curtains as well as those on our side. Let me read you two more quotations from Djilas' knowing assessment:

"Moscow is no longer that which it was. It single-handedly lost the monopoly of the new ideas and the right to present the only permissible 'line'. . . . In Moscow itself the epoch of great Communist monarchs and of great ideas came to an end, and the reign of mediocre Communist bureaucrats began. . . .

"The world center of Communist ideology no longer exists; it is in the process of complete disintergration. The unity of the world Communist movement is incurably injured. . . ."

And again, Djilas writes,

"The world in which we live is a world of uncertainty. It is a world of stupefying and unfathomable horizons which science is revealing to humanity; it is also a world of terrible fear of cosmic catastrophe, threatened by modern means of war.

"The world will be changed, in one way or another. It cannot remain as it is, divided and with an irresistable aspiration toward unity. *World* relationships *which finally* emerge *from this entanglement will be neither ideal nor without friction. However, they will be* better *than the present-day ones!"*

And, then Djilas pens this sharp idea, "Contemporary Communism could help achieve the goal of world unification most of all by political *means—by internal decentralization and by becoming more accessible to the outside World. However, it is still remote from this. Is it actually capable of such a thing?"*

Now remember, please, that Djilas wrote his manuscript in 1956, prior to the revolts in Poland and in Hungary; indeed it was for his forthright, public hailing of the latter as the beginning of the end for Communism that he was given his first prison sentence!

Yet, while the book was still being printed, less than one year later, the Communist industrial organization was decentralized; probably for the reason that the educated industrial managers and engineers in the centralized organizations were thinking too dangerously for the Party chiefs to leave them together.

Yet this will happen again at the level of the decentralized Party bureaucrats; and no one knows yet how much that sudden disruption of their existing production program has upset either their industrial or their agricultural progress presently.

Certainly the flood of present patter and chatter and letters from Moscow at the international level could be to take our eyes off the strains on which they are sitting at home?

When you start shaking at Khrushchev's blasts—or even at Russia's real technological weapons progress—think further: *How would you like to start a World War from Moscow with some* 100,000,000 *Eastern Europeans, in their Communist bondage, ready to seize any such disturbance to multiply ten thousand times the boiling out of the passions for Freedom we have already seen in the East Berlin riots, in the Polish upset, in the tragedy of Budapest?*

Or even with a quarter-billion Russians behind you whose standard of living forty years after the October Revolution has made no net progress whatever—as good Communist authorities admit—despite their Industrial advances? How would you like to think, in Khrushchev's place, of trying to keep those industries going, calling as they do for, as Djilas again put it, conditions where

"Only a literate and interested worker can do the sort of work required."

But where, in reality, as Djilas *also* writes:

"The greatest waste is not even visible. This is the waste of manpower. The slow, unproductive work of disinterested millions, together with the prevention of all work not considered 'socialist' is the incalculable, invisible, and gigantic waste which no Communist regime has been able to avoid."

So, in our troublous times today, let's keep our eye on the "satellites" in Eastern Europe too. They are, at least, our most powerful, ever-ready counter-balance

to many of the dire implications of the other "satellite" orbiting through the skies over our heads!

And, no less let's keep our eyes on the real conditions inside Russia itself. Answering questions at his news conference in Washington on January 11th, Secretary of State Dulles gave us all curious factual reassurance in these terms, though stated with his perverse inability to communicate and dramatize the solidity of the difficult basic course he is steering. He put it this way:

"I was noticing, for instance, that at the Cairo Conference the most sweeping offers were made (by the Russians) of economic assistance to the Asian and African countries. They just said, 'Tell us what you want and we will give it to you without conditions'. But when they repeated that in their own press (Pravda and Izvestia) they were careful to leave that out because they did not want to let their people know what propaganda they were carrying on abroad. That might be bad propaganda in the Soviet Union.

Now some columnists have read into this that Russia's untruthful propaganda is more persuasive than ours, which is lashed voluntarily to the mast of the Truth. And some in fact have even urged we would be justified, in such a case, to move to some extent to fight fire with fire. Here, I suggest Dulles rightly reminds us "these are not the times that call for that type of smartness" but rather for continued sincerity.

But why does neither Dulles nor the press draw graphically for us, and all the world, the deeply significant fact that even Khrushchev, with all his bluster and all his sputniks, does not dare tell the Russian workers that they are to be further bled and drained while the resources of their Mother Russia—which, like our own, are limited in both the material and the manpower spheres—are to be further dissapated in what Djilas so prophetically and correctly called *"senseless actions, from which, on more mature thoughts, they constantly retreat"?*

Did not Leo Cherne put the really notable fact most clearly when he said to the Sales Executives Club a few weeks ago:

"The greater their reach, *the* weaker *their grasp."*

and, noting that commitments abroad become increasingly *un*popular within Russia, went on to suggest:

"Khrushchev was TIME'S man-of-the-year for 1957. *Not impossibly, he'll be lucky even to be around at the end of* 1958. *With friends like Mikoyan and Suslov, you don't need enemies".*

So, is it not a time to be earnest yet, in the Wallace Clark tradition, no less a time to be calm? Time to take the balanced look, then the practical steps—not the hectic, hurried, harassed hops of the expedient and the basically incompetent?

Let these remarks of mine not be taken to be merely negative, however. While the Communist dictators channel their human resources, their finest brains, their material strength to pervert the application of basic Science to weapons of horror rather than to appliances of peace and plenty, let us continue to keep forces and equipment in being which always overmatch their might so they never will dare unleash it; knowing their own internal weaknesses, on the one hand, which utterly prohibit sustained success and knowing, on the other hand, our ability and will to retaliate with instant massive destruction in their own cities and production centers.

But, in buttressing our own capacity to continue to be able to do that, let us really think twice before going to such expedients as a kind of "German General Staff" as the best way to do so! After all, the cold reality is that the centralized German General Staff represented the scheme of organization which lost both World Wars. Leaving out its obvious theoretical undesirability as an organizational approach for a Free Nation, there could be no more conclusive practical reason for shying off from it than that it simply does *not* work—and does *not work at most frightful costs and consequences!*

Personally—and speaking now only for myself, as one observer with at least some organizational experience—despite all the clamor to rip the Pentagon apart, I suggest this is a time to heed the deeply applicable title of Bob Ruark's revealing book on Africa, *Something of Value;* the essence of the message, spelled out in the bloody Mau Mau massacres, simply being: do not take away from an established order the principles and beliefs which sustain its people until you are *sure* you have "Something of Value" to put in their place!

Those who have studied our complex military organization most responsibly and comprehensively—be they hard-working Congressional committee members, the career Chiefs of Staff, or the recent experienced Secretary of Defense Wilson with all his vast combined industrial and governmental experience as he bowed out of that weighty post—all have urged more responsible *decentralization,* rather than piling on further centralized staff agencies, as the true organizational necessity today.

There are indeed a growing number of able and knowledgable leaders who think our best—if not our only—real route to get back the technological and weapons priority, which we had at the end of World War II, but which is at least in jeopardy today, is by a quite different route than more Pentagon centralization.

The men of this school of thought suggest that the rivalries among the separate Services are so natural, inevitable—and, within proper bounds, even healthy—that the best organizational course is not to superimpose new coordinators and put further links in the already over-long decision chains, but rather to "by pass" these military chains—now far too big and complicated to change fast anyhow—and turn the obligation to create needed drastically different or improved weapons concepts to civilian hands, by following the precedent which did get us the atomic bomb, radar, the proximity fuse and similar devices which did give us leadership—instead of "second best" in kind and time, during the heat of the last War.

May I quote just these few lines from a recent talk of one of my Company associates to stimulate your own thinking in this direction? He said:

"All experience shows emphatically that the American system of competition and incentives and individual initiative and freedom is the most dynamically effective producer of technological goods and services.

"There is never a question in our minds as to the over-all superiority of our private enterprise production of automobiles, refrigerators and the like.

"For our defense and atomic energy work we depart widely from the normal American private enterprise system. Our defense work is being carried out with a minimum of incentives and highly centralized government control of detailed *plans and operations. . . . Unquestioned superiority of American weapons could be obtained by finding a way to fully use the American system to evolve and produce them."*

How curiously like the "Conclusion" of the Clarks this current conjecture on how to meet our serious weapons problems turns out to be!

Even more curiously, how much it also turns out to parallel the first part of the final advice that I have already cited, which Djilas gave to our opponents, out of his broad but totally disillusioning life-time experience as a Communist, namely that:

"Contemporary Communism could help achieve the goal of world unification most of all by political means—by internal decentralization and by becoming more accessible to the outside world."

So let us not "centralize" when the evils of centralization are the best visible strength we have working to undermine the progress of our adversaries! Let us rather give thought both to even more—and more responsible—decentralization; and likewise to the second part of Djilas' admonition, namely helping the Russians *"become more accessible to the outside world"!*

Late as it is, in closing I must take the liberty of going back once more to Secretary Dulles' news conference, and his earn-

est, thought-provoking final idea, that:

"There are areas, I believe, where we have a common interest (with the Russians). I don't think either the Russians or ourselves want to live in a world where we could all be destroyed, because the possibilities of destruction have been refined to a point where almost accidentally you could set off a series of events that would destroy us all. I don't think the Russians want that and we don't want it.

"You can find areas of common interest. The problem then is how do you develop, from an area of common interest, something that is dependable. . . .

"There is. . . . an area where there may be a common interest in certain types of exchanges—exchanges of information, exchanges of technical people, exchanges of students and things of that sort. As I say, the topics have been agreed upon; the language of implementation is being agreed upon. That is a useful kind of an agreement. . . . That is the type of agreement which can be usefully carried out."

Again, this part of the Secretary's remarks did not hit the reporters as headline material. Yet does it not—as both Dulles and Djilas from their diametrically opposite backgrounds jointly sense—offer our best hope; in the area of free interchange of ideas and of personal man-to-man exchange of views where our American "Know-How" has best developed and best produced?

Does it not move toward the peaceful goals so ardently wanted by the billions of people of *all* nations, in the direction of extending and applying to the field of Organization for peace and productivity, at the international levels, those same principles of Organizing which your experience and mine prove to be effective here—and which the down-to-earth practical experience of Wallace and Pearl Clark showed to be equally applicable for similar progress by other peoples in other countries?

In accepting this Medal and Award, in memory of our calm, distinguished friend Wallace Clark—and in the company of our equally distinguished friend Mrs. Clark—let me close with the hope, for you certainly as much for me, that in this period of distractions, of clamor, of noise and confusion, we all pause long enough to remember that these same principles—eternal in origin, ever new in application—still point our best route to balanced, constructive progress; and in both the military and the political courses which it is now increasingly so much the solemn responsibility of the United States to set, to urge, to follow—and for the billions with the common thirst for Peace on both sides of the World's current rubber curtains, wherever they stretch and drape? ■

Admiral Radford Speaks At S.A.M Dinner To Honor Reuben Robertson

THE RECENTLY retired chairman of the Joint Chiefs of Staff was principal speaker at the presentation of the Society for Advancement of Management's Annual Human Relations Award to Reuben B. Robertson, Board Chairman of the Champion Paper and Fibre Company, Asheville, N. C., on January 22, 1958.

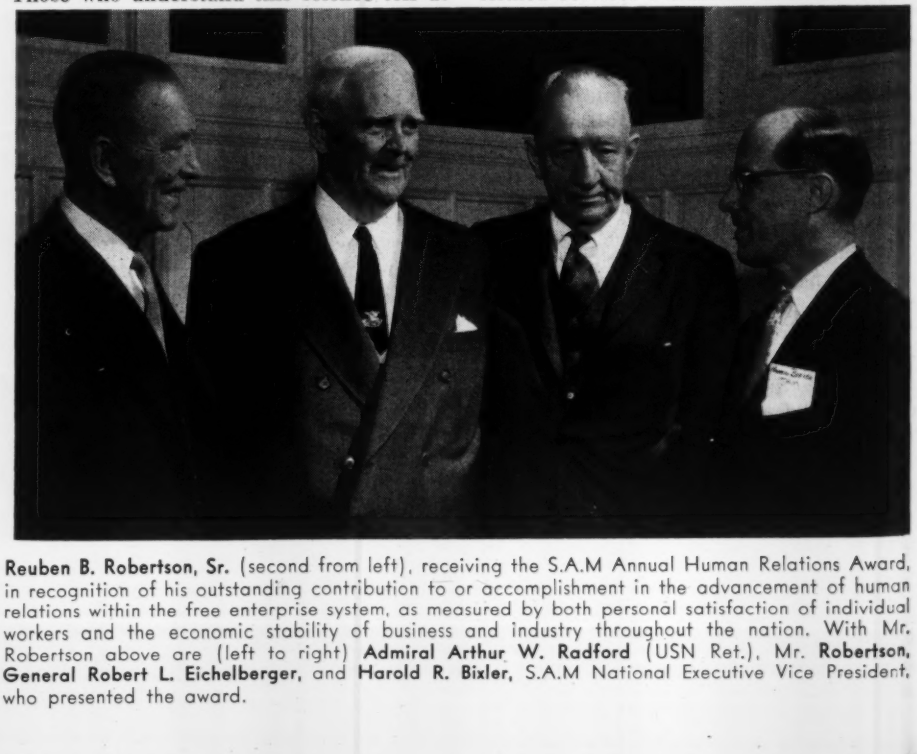
The Admiral said, in part.: "The Society for the Advancement of Management chose wisely when it selected Mr. Reuben Robertson for its annual Human Relations Award. I have been associated with the Champion Paper Company only a few months, but already I have seen the stamp of Reuben Robertson's understanding of human relations at every level of company operations.

"Everyone has a tendency to evaluate human tableaus in the light of his own experience. I, therefore, say: find me a ship where the morale is high and I will lead you to a captain who understands the science of human relations. No ship, and no corporate body, will ever accomplish its mission unless its Captain or President—call him what you will—promotes harmonious and cooperative working relationships in the organization he heads.

"I have read the rules and standards which the Society for the Advancement of Management applies when it measures a prospective recipient for the award which is being presented tonight. I never saw a yardstick which measured a man's talents and accomplishments with more precision. The rules and the man are as one. . . .

"I'd like to say a few words about a science—the Science of Communications. Those who understand this science tell us that Communication always requires at least three elements—the source, the message, and the destination. You would think, in a formula which has only three elements, that not much could go awry. But we know from experience that all kinds of distortions enter the system. They enter because the source, often the means of transmission of the message, *and* the intended receiver all have the defects of being human—of having built-in prejudices and built-in limitations. It is often said that if we, the people of America, could but communicate our thoughts, hopes, and aspirations to the *people* of Russia, there would be an end to the crisis the world faces today. So far, all of our efforts to communicate with the Russian people have ended in failure; they have so ended because the aims, objectives, and practices of International Communism have distorted our message. I am sure that the Society for the Advancement of Management will reserve its greatest award for the man who can solve this problem.

"Even in our own country we have difficulty getting messages across to our people. Only last week I was talking to General Nate Twining, that fine Air Force officer who succeeded me as Chairman of the Joint Chiefs of Staff, about the difficulty—even frustration—we had experienced in trying to awake America to the menace of International Communism and, most particularly, to the threat it posed in the fields of science and technology. For instance, when General Twining returned from a trip to Moscow over a year ago, he reported his sense of danger to the Senate Armed Services Committee in these words:



Reuben B. Robertson, Sr. (second from left), receiving the S.A.M Annual Human Relations Award, in recognition of his outstanding contribution to or accomplishment in the advancement of human relations within the free enterprise system, as measured by both personal satisfaction of individual workers and the economic stability of business and industry throughout the nation. With Mr. Robertson above are (left to right) **Admiral Arthur W. Radford** (USN Ret.), Mr. **Robertson, General Robert L. Eichelberger,** and **Harold R. Bixler,** S.A.M National Executive Vice President, who presented the award.

Have You A Depression Psychosis?

If The Answer Is "Yes" S.A.M Is Your Antidote

E. R. RUARK

MANY TIMES in the last six months we have had expressions of alarm from businessmen about the increase in unemployment, the shrinking of sales volume and the squeezing of profit margins.

As I look at our failure to build or even maintain membership during this period, it seems apparent many of us have the disease of depression psychosis. This ailment was widespread during the 1930's and, of course, we had the opposite reaction as well in those who constantly stated that "Prosperity is just around the corner".

None of us can afford to become or remain defeatists because of this ailment. We must appreciate the fact that membership and participation in S.A.M can be even more valuable during periods of economic stress.

As business tightens its belt because of shrinking sales and profits the demands on its leaders increase proportionately. New or improved management techniques and approaches, the refinement of methods in manufacturing, sales or service all become of increasing value to you since they may well mean the difference between operating loses or earnings for your stockholders.

Thus, in S.A.M there is as much or even more to gain during periods of economic recession.

Now is the time for each of us to take this approach in selling S.A.M membership to new people who can gain from such opportunities, and to our members who are apt to drop S.A.M membership for any controllable reason. Keep in mind that no sound business executive will refuse to spend money when such an investment will earn many times the cost.

The year 1958 will offer almost unlimited opportunities for the real business leader to gain through S.A.M the answers to many of his problems. He realizes that "he must evaluate the past, work in the present, and think in the future". S.A.M offers aids in each to those of us who participate. It becomes more productive as we grow. Let's throw off this depression psychosis and grow in 1958.

Eugene R. Ruark

S.A.M Vice President of Membership
Personnel Director, Indiana Farm
Bureau Cooperative Association

'Given the heavy emphasis which the Russians are placing upon the forced development of a new technical generation, beginning with primary education and carrying through basic research and engineering development, we must in prudence reckon on the possibility of their achieving a scientific breakthrough and consequent technological surprise in new weapons.'

"Similarly, over two years ago, in a speech given to the National Petroleum Association, entitled "The Technological Race," I warned that we should not "regard lightly (Russian) pronouncements, few though they are, about their nuclear developments and their projected space satellites."

"I repeat these quotes from General Twining and myself to you tonight *not* so you can measure their prescience, but so you can measure their failure to transmit the warning we both had in our minds. Sometimes, *other* means of transmission carry a more powerful message than mere words can convey.

"On October 4th, 1957, the Communists fired a shot which was both seen and heard around the world—a shot which has carried a message of warning to the American people which no words had been able to express. In many respects, I am happy that this dramatic physical evidence of Russian technological achievement burst upon us with all the impact of a telegram in the middle of the night. All of our history as a Nation has demonstrated that once our liberty was clearly threatened, we would rise to the task of its defense, whatever effort was needed. I am confident we can do it again; we only need to realize our danger and recognize our weaknesses. Once that message becomes apparent for all to see, America has in the past been, and in the future will be, unbeatable, unconquerable.

"I am confident if Sputnik had been fired at about the time we took our military and foreign aid programs to the Congress last year, the President's recommended programs would not have been pared below what he and the military thought was necessary. In the budgets submitted by the Executive, as well as in the reaction to them in the Congress, you will always find reflected the attitude of the people. Last year, the atmosphere I sensed was one of economy. In fact, it is no secret that I was asked four days after my retirement last August, to assist in making a final plea to the Senate Appropriations Committee to restore what were considered to be dangerous cuts in our Foreign Aid Program.

"The effort was only partially successful, and it is a matter of record that I confessed at that time to a sense of failure to communicate the importance of this program to the American people. I stated then that I was convinced that if the necessity for our collective security program was brought home to the mothers and fathers of America they would all vote for it. I make that statement again tonight and hope for better "communications" in the future. We must convince our people that a sound foreign aid program is the key to our collective security and our individual survival.

"At the same time, we must not go so far overboard in the appropriation of money that we wreck our economy. I hear voices today which urge, as a cure-all for past economies, the expenditure of vast sums of money. The continued health of our economy is just as important to our survival as the winning of the technological race. Winning the race for weapons supremacy, and wrecking our free enterprise system in the process, would, in the long run, defeat us by a different road—a road which Lenin hoped for when he said that Capitalism would spend itself to death.

"America's greatest product for export is its free enterprise system and a healthy economy which supports a high living standard apparent to all the peoples of the world. We can never sell a sick animal.

"Let me say a few words now about what we must do to stay ahead in the technological race, which is much easier to prescribe than the "how" of accomplishment. The "how" requires concentrated national effort, always difficult to inspire except in great and apparent times of grave danger. In the same 1955 speech to which I alluded earlier, I laid down four things we must do to stay ahead in the race. Because they are just as valid today as they were then, they bear repeating:

'First, we must avoid our national bent toward complacency and self-satisfaction. I suggest we be very modest indeed when sensing our own well-being, and that we no longer take our technological advantages for granted.

'Second, we must help others to understand the significance of this technological race, not to spread alarm but to develop a full understanding of the facts, and to generate a will to face them squarely.

'Third, we must encourage an increasing proportion of our youngsters to become scientists and engineers—

(*Continued on page* 30)

When The Brass Loses Its Glitter

by C. B. Bjornson

Superintendent of Inspection
Convair
Fort Worth, Texas

BUSINESS ADMINISTRATION and Management Engineering have matured as professions to the point where the practitioner is equipped with a full complement of basic precepts, fundamental principles, and axiomatic formulae. Thus, it is generally accepted that a qualified Management Engineer can equate a given management problem by the simple application of factors as familiar as household items. It is assumed that the knowledgeable weighting of those factors to compensate for peculiar situations or personalities can provide the solution for all but the knottiest situation.

Unfortunately, any plan for the cure of management ills necessarily presumes the competency of the topmost level of management for intelligent execution of policy and for sound direction of the organization. In small compact organizations the close relationship between the ownership function and all levels of management usually minimizes the effect of top management failure on the lesser levels of the organization. The detached ownership-management relation inherent in large complex organizations inevitably results in a top management failure reflecting to the detriment of each component of the organization. Whenever a sizeable corporation removes a General Manager who falls short of the required stature, there is an inherent possibility that elements elsewhere in his operating organization contributed to his failure.

The situation is unavoidably aggravated because of the prolonged interval which transpires between the appointment and "resignation" of an inept General Administrator. Initially, it is expected that the time needed for a new man to familiarize himself with a complex organization will be unproductive. Secondly, even the grossest incompetent will require time to demonstrate his inability or otherwise mismanage his responsibilities sufficiently to alert and alarm a Board of Directors. And, before the Board will have finally resolved on dismissal action, a period of months may elapse.

The imponderables which confront the succeeding executive or an organizational analyst in trying to reconstruct a management team preclude an intelligent evaluation of the existing management structure and make doubly difficult the task of rebuilding. For example; how "well" did the previous manager fail? Was his perfromance marginal? Did he barely fall short of adequacy or did he thoroughly louse-up the operation? Under the ex-manager, if the performance of supervisor "A" has been poor, is "A" per se incompetent or a victim of circumstances? What is the true calibre of the subordinates that were appointed by the ex-manager? Could he judge men better than he could administer a business operation? How to regard those supervisors who wholeheartedly or blindly cooperated? Those who inwardly or overtly rebelled? When and where did the supervisors' loyalty to the ex-chief become a liability to the company? On what bases and premises can the organization be reconstructed?

Traditionally, failure at the top level of management is rarely admitted as the cause for removal of a General Manager or Chief Executive. The announced reasons are usually carefully couched to give the impression that his "resignation" is unfortunate and was accepted with extreme reluctance and deep regret. The knowing whispers that filter down from the inner-circle group are usually sufficient to thoroughly becloud the matter and insure everyone's bewilderment.

Why not better ignore tradition and professional courtesy in favor of reassuring the organization by means of an honest notification that the head man was fired and by simply stating the true reasons for the action? Top level mismanagement is normally reflected in mathematics all too apparent to a Board of Directors but the intangible effect

C. B. BJORNSON has been Superintendent of Inspection at the Fort Worth, Texas, plant of Convair, a Division of General Dynamics since 1953. He went to Convair from Kaiser-Frazer Corporation's Willow Run plant where he was Chief of Tool Liaison Engineering. Areolab Development Company of Pasadena and Hammond Aircraft Company of San Francisco used his services from 1941 to 1951. From 1946-51 Mr. Bjornson was also a Management Engineering Consultant in San Francisco. He is a native of Minneapolis.

may extend to the lowest level of management and to a degree that deserves serious consideration.

The erosion that a deficient top executive can unintentionally inflict on conscientious, capable minor executives can nullify years of effort in the direction of management improvement. Morale, initiative, enthusiasm, loyalty—all suffer when the Chief Executive is lacking. Thus, the total cost represented by top management failure must always include an intangible loss chargeable to some degree of deterioration of the entire organization.

The ownership function is obligated to the stockholders and employees alike to exert any effort that will help to dispel doubt and clear the atmosphere in order to minimize the effect of a major management change.

Consider the questions that beset the new manager:

"Did the ex-chief receive the cooperation he needed from the owners, and will I? Did he have full authority or was he denied complete control?

"Where did he really fall down? Can I avoid the same pitfalls?

"What about the organization I've inherited? Are the supervisors who seem to welcome me sincere? Or opportunists? Do the more reserved subordinates resent the change? Or are they waiting for me to demonstrate how I'll operate? How well do they know their business?"

Consider the subordinates' dilemma:

"The announcement said the boss resigned. Is the grapevine right? Was he really fired? Don't the owners know he wasn't the man for the job? What will the new chief need to do to look better to the owners? Is he really a better man?

"What about me? He's certain to make changes — will he bring in his own clique? Can I convince him I'd have produced better if the ex-boss hadn't made it so difficult? What should my attitude be? Does he know anything about my particular end of this business? If he leaves me alone does it mean that he's satisfied with my work? Can he recognize a good performance on my part? Is he the cagey kind or can I accept him at face value? Should I silently go along when I think his instructions are wrong? How does he inwardly react when I offer an honest argument? Unless he demonstrates real ability from the outset, should I try to help (maybe carry him) or passively resist until I'm satisfied about his ability? Where will I stand?"

Every effort on the part of ownership to dispel doubt in such situations is amply justified and will serve as evidence of ownership's good will and sense of obligation. A simple, factual explanation of the reasons for the dismissal or resignation; a concise outline of the company aims and objectives or a brief resume of the Board's instructions to the new manager; a brief summary of the new Manager outlining his tentative plans; all these help to remove suspicion, eliminate sparring for position and expedite the reorganization of the management team. ■

3 σ ?

STANDARD practice in statistical control seems to require setting control limits at $\pm 3\sigma$. If a situation remains in statistical control, on the average three observations out of a thousand will fall outside control limits and will result in incurrence of the costs of looking for trouble when none is present. Conversely, a situation can go out of control, and if average and/or variance do not shift too radically, one or more observations can continue to fall within the established limits resulting in the incurrence of the costs of not looking for trouble when trouble is present.

Theoretically, control limits should be established where the expected value of the incremental costs of looking for trouble when it isn't there just balance the expected value of the incremental costs of not looking for trouble when trouble is present. It can be shown that 3σ limits cannot fulfill this requirement except briefly and accidentally.

". . . the total cost of a control plan (to be minimized) is the cost of inspection . . . ; plus the cost of looking for trouble when it isn't there, times the probability that the difference between observation and expectation is greater than the allowable limit given that the process has not changed; plus the cost of not looking for trouble when it is there, times the probability that the difference between observation and chart mean (expectation) is within the allowed limits given that the process has changed."[1] Of the five items mentioned, two seem accessible and three do not. The cost of inspection should be reasonably easy to ascertain. The probability of looking for trouble when it isn't there is relatively simple if the distribution be normal; with 3σ limits it is about three in a thousand as noted. The probability of not looking when there is trouble—when the process has changed—depends upon the kind and degree of change which may occur, and which Bowman and Fetter point out is virtually always unknowable. Moreover, the cost of not looking when there is trouble also depends upon the extent of the unknowable change. To some extent these two offset, bigger changes are more likely to be spotted and will cost more if they are not, so a smaller probability of not looking times a greater cost of not looking may vaguely approach a greater probability of not looking times a smaller cost of not looking.

In any given situation, all of these, given omniscience,[2] could produce an answer to the limits problem, and that answer conceivably could be $\pm 3\sigma$. However, there remains the cost of looking when there is no trouble, and this varies almost continuously. In periods of stress and emergency, the time needed to look and to establish the absence of trouble may be very valuable indeed. A few days later the investigator may have some idle time and the cost of looking may approach zero cost. Given omniscience, the changing values of these hours would be known, but the optimum control limits would vary as the costs changed. While 3σ might be correct today, given today's work load; when that work load has changed tomorrow, the value of the investigator's time has changed, and the appropriate limits change with it.

Doubtlessly managers regularly distress their statistical control experts by not investigating points somewhat outside control limits on days when they are pressed for time, and equally by investigating points somewhat inside control limits on days when they have little else to do. And in this they are more rational than their statisticians.

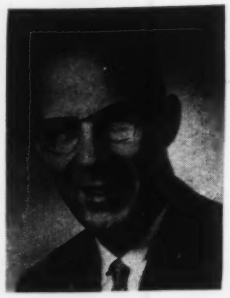
Billy E. Goetz
Professor of Industrial Management
Massachusetts Institute of Technology

[1] *See Bowman and Fetter*, Analysis for Production Management, *pp.* 154-5, 172-3, 182-3, Irwin, 1957. Parentheses mine.

[2] *Of course, given omniscience, we would have no use for statistical control!*

S. A. M *Newsletter*

Current news of interest to all S.A.M Members, specifically for the 900 Chapter and National Officers of the Society.



HAROLD R. BIXLER
Executive Vice President

NEW CHATTANOOGA CHAPTER INAUGURATED—Further expansion of the Society in the Southeastern Region was evidenced by the inauguration of the new CHATTANOOGA Chapter on Friday, January 24 in the Continental Room of the Reid House in Chattanooga. Seventy-four management representatives were present, including forty-one charter members of the new Chapter. National Board Chairman, JOHN B. JOYNT, was the principal speaker on "Executive Appraisal and Management Development". Southeastern Regional Vice President, HEZZ STRINGFIELD, presented the charter on behalf of the National Officers. Chapter Officers elected and installed at that meeting include National Director. A. K. RICHARDSON, Assistant General Manager, Combustion Engineering; President, FORREST TUGMAN, President, United Hosiery Mills; Vice President for Programs, DAVE FAULKNER, Director of Management Development, Combustion Engineering; Vice President for Membership, JOHN W. O'NEAL, Works Manager, Mississippi Valley Structural Steel Co.; Vice President for Student Activities, CHARLES C. THOMPSON, Assistant Professor, University of Chattanooga; Secretary, LORING H. CLICK, Superintendent, Koehring Southern Company; Treasurer, WILLIAM A. CHALKLEY, Branch Manager, Fidelity Sales Corporation. Representatives from other leading companies included Gilman Paint and Varnish Company, Chattanooga Medicine Company, Peerless Woolen Mills, Southern Chemical Cotton Company, Brock Candy Company, Chattanooga Armature Works, Container Corporation of America, Burkhart-Schier Chemical Company, Ross-Meehan Foundries, American Uniform Company, Riegel Textile Corporation, Katherine Rug Mills, Carroll Russell and Company, Tennessee Valley Authority, Baroness-Erlanger Hospital, and others. S.A.M National Vice President for Seminars, LESTER F. ZERFOSS, American Enka Corporation, will speak at their February meeting on "Executive Training". Particular credit for the organizing work there is due WILLIAM CHALKLEY, former President of the KNOXVILLE Chapter. Hearty welcome to CHATTANOOGA, in the growing international family of S.A.M Chapters.

S.A.M—IMS COOPERATIVE RELATIONSHIPS—Under arrangements recently completed between S.A.M and the Industrial Management Society of Chicago, S.A.M members can now obtain the proceedings of the IMS 21st Fall Annual Time and Motion Study and Management Clinic at member price of $4.00 per copy. S.A.M's official publication, **ADVANCED MANAGEMENT**, is being offered the 1,000 IMS members at a special subscription rate, with sample copies of the magazine and index of contents for the calendar year 1957 being sent them from IMS Headquarters. Copies of the 120 page IMS publication, which includes a wealth of material on Time Standards, Incentive Systems, Work Simplification, Job Evaluation, Controls, Cost Reduction, Plant Layout and various managerial subjects, may be obtained by writing directly to ROBERT J. MAYER, Executive Manager, Industrial Management Society, 330 South Wells, Chicago 6.

NEW LIBRARY SERVICE FOR ADVANCED MANAGEMENT READERS—A new and exclusive book service is now available to the 51,000 readers of ADVANCED MANAGEMENT, **under special arrangements recently completed between S.A.M and the Executive Library Service. This is called the** ADVANCED MANAGEMENT Library Service **and offers each month 20 to 30 leading management and related publications, (see listings in** ADVANCED MANAGEMENT **monthly). Books on loan and purchase options at discount from publisher's list price to S.A.M members are available both new and used management books, with convenient order handling arrangements. Details of this plan are shown on page 23 of the February issue of** ADVANCED MANAGEMENT, **copies of which will be sent on request. This service provides not only information each month about a larger number of the top management books than previously, but easy-to-use facilities for the temporary or permanent use of these books as selected by each reader. Orders for books should be sent directly to** ADVANCED MANAGEMENT Library Service, **3209 Columbia Pike, Arlington 4, Virginia.**

SPOKANE CHAPTER SHAPING UP—A new S.A.M Chapter in Spokane, Washington, will be inaugurated during the first week in March as part of the Society's expansion in the Western Area. Organization of the new chapter has been conducted under the leadership of Dean RICHARD F. McMAHON, School of Economics and Business Administration, Gonzaga University, at Spokane. He also was instrumental in establishing an S.A.M University Chapter at that institution during January. Already the new Chapter and the University has sponsored a Methods Improvement Institute, conducted last December, representing five continuous days of management development sessions for representatives of industrial and commercial organizations, held at (Bing) Crosby Library, Gonzaga University campus. It's well worth writing Dean McMANUS for a copy of the program for this institute. HAROLD R. BIXLER, National Executive Vice President, will inaugurate both the University and Senior Chapters early in March and discuss **"S.A.M and the New Role of Management in American Business and Industry".**

TESTIMONIAL TO FRANK F. BRADSHAW—When FRANK BRADSHAW stepped down officially as S.A.M Chairman of the Board last year, he re-stated with his usual eloquence his philosophy of the objectives of the Society, indicating some of the basic needs for the future. In receiving the gavel as the new Chairman of the Board, JACK JOYNT paid tribute to the outstanding wisdom and leadership of FRANK BRADSHAW over a period of years and said, "We wish to extend our sincere appreciation for the inspirational leadership you have provided during the past years. We could always rely upon your penetrating insight and sound decision and frequently quote one of the statements you made some time ago: 'participation in S.A.M is learning at its maximum' ". By a rising vote with prolonged applause, the Board of Directors at that meeting unanimously confirmed this sentiment on behalf of all the members. In commemoration of this event, FRANK BRADSHAW, at an informal gathering of National Officers and Staff Department Heads, was recently presented with a beautifully engraved silver tray containing the facsimile signatures of all of the National Officers surrounding the sentiment, "FRANK F. BRADSHAW—in highest esteem by S.A.M Officers and Members". The presentation was made at the home of National Executive Vice President, HAROLD BIXLER, in Darien, Connecticut.

S.A.M TELEVISION PARTICIPATION — On March 6, S.A.M will participate in the world's first telecast, "Tele-Manage", illustrating management supervision and the importance of decision making in management, through new and improved techniques, to meet the challenge of speed and accutacy in decision making. This is part of a national program sponsored locally by Sales Executive Clubs, Junior Chambers of Commerce, and various colleges and universities. It is participated in by S.A.M, National Management Association, and National Office Management Association. The overall program includes the nights of March 4, 5 and 6 on "Tele-Sell" and "Tele-Manage", and is anticipated to be the largest business training program ever conducted. It will be seen on closed circuit television by an estimated 200,000 persons in 62 cities throughout the U.S. and Canada. The newest research techniques and scientific findings will be applied to the management and sales training during the three 90 minute programs originating live from New York City. Some 33 of the nation's foremost executives and authorities in management and marketing will participate, including S.A.M representative ROBERT W. DAVIS, Western Electric Company, former President of the NEW YORK S.A.M Chapter. Programs and tickets for sale have been sent to the respective chapters, with a commission available to the chapter for local sales.

SAN JOSE CHAPTER BEING ORGANIZED—Continuing S.A.M growth in the West Coast Area will be marked by inauguration of a new chapter on March 18 in San Jose, California. This follows successful organizing meetings conducted during January and February with sponsoring assistance from the SAN FRANCISCO Chapter. and participation by WILLIAM R. WILLARD, representing the West Coast Chapters on the National Executive Committee. HAROLD R. BIXLER, National Executive Vice President, will present the charter and discuss Executive Appraisal and Management Development. The local organizing has been under the direction of JOSEPH N. TRICKETT, Professor of Management and Director of the Management Center of the University of Santa Clara, who was formerly with the Food Machinery and Chemical Corporation of San Jose.

CIVIC AFFAIRS PROGRAM WINS MORE RECOGNITION — S.A.M's National Civic Affairs Program continues to win more praise and recognition throughout the country in its expanding program of services to hospitals and community agencies. Recent public highlight was a two-column article in the **New York Journal of Commerce** on January 6 showing how industry's management skills aid hospitals, and telling its 135,000 readers about how S.A.M functions as sponsor and coordinator of the program. A classification of case studies from the files of industry's advisory board for hospitals is now available from Vice President GEORGE GOETTELMAN in National Headquarters and includes the latest on Maintenance of Work Program. Two new publications of the division have now been completed and are available for general distribution. They are the leaflet showing the S.A.M Civic Affairs Program on a national basis for hospitals, schools, civic groups, community chests and

others; and the program for the S.A.M Hospital Management Conference to be held in New York City March 14. Copies are being sent the Chapters and are available to members everywhere.

AUSTRALIAN INSTITUTE OF MANAGEMENT —Cooperative relationships are now under way between S.A.M and the Australian Institute of Management, as reported in the December newsletter. All S.A.M members with present or possible future interest in Australia can benefit from the reciprocal arrangements to formalize mutual activities between these management organizations on an international basis. S.A.M information has now been sent to the various A.I.M divisions in Adelaide, Brisbane, Melbourne, Newcastle, Perth, Sidney and Tasmania, Australia. The A.I.M will be official host to the 1960 International Conference on Scientific Management, which will be held for management leaders among the 27 nations represented in CIOS", co-sponsored by the Council for International Progress in Management of the U.S.A., of which S.A.M is a sponsoring organization.

NATIONAL OFFICE MAILINGS — All 900 Chapter and National Officers are reminded to check their particular interests in the following combined mailings sent Chapter Presidents and National Directors since the last listings, and to broadcast the particular information they contain in line with their specific purposes: Call for S.A.M National Awards Nominations, Membership Termination Follow-Up Material Handling Industry Report 105, S.A.M Management Development Clinic for Small Business, Monthly Membership and Chapter Performance Awards Plan Reports, S.A.M Sample Program of Forms, and New S.A.M Publication—"Facts on Writing for ADVANCED MANAGEMENT".

NEW ERIE CHAPTER UNDERWAY—Further organization growth in the MIDDLE ATLANTIC REGION will be epidenced upon the inauguration of the new ERIE (Pennsylvania) Chapter on March 20th. Organization meetings have been held since last September under the leadership of DAN E. DUNNE, President, Penn-Union Electric Corporation; and DR. JOHN WALDRON, Professor of Business Administration at Gannon College. Board Chairman, JOHN B. JOYNT, has actively participated in representing the National S.A.M Officers and was the speaker at the February meeting on the subject "Cost Reduction During a Period of Transition". The new ERIE Chapter will include management representatives from leading industrial and commercial companies in the area, as well as educational institutions, governmental agencies all interested in management development. L. T. WHITE, S.A.M National Vice-President, will be principal speaker at the inauguration on "Profit Planning", and DAVID N. WISE. National Vice President of Chapter Operations, will present the charter on behalf of the other National Officers.

FOREIGN POSITIONS AVAILABLE — S.A.M members interested in obtaining additional foreign experience will be interested in the latest available positions announced by the United Nations Technical Assistance program. They are in the fields of economic surveys, public administration, industrial development and productivity, national resources development and power, trade promotion and marketing, public finance, statistics, transport and communications, social development, housing, community development, social sciences, economic surveys. Details available from Technical Assistance Recruitment Services, United Nations, New York 17, New York.

"SOME WAYS TO KILL AN ASSOCIATION" —Thanks to the DAYTON Chapter for mentioning a recent publication of the American Trade Associatoin Executives which states the following ways to kill an association: "Don't come to meetings. But if you do come, come late. If the weather doesn't suit you, don't think of coming. If you do attend a meeting, find fault with the work of the office and other members. Never accept an office, as it is easier to criticize than do things. Nevertheless, get sore if you are not appointed on a committee; but if you are, do not attend committee meetings. If asked by the chairman to give your opinion regarding some important matter, tell him you have nothing to say. After the meeting tell everyone how things ought to be done. Do nothing more than is absolutely necessary; but when other members roll up their sleeves and willingly, unselfishly use their ability to help matters along, howl that the association is run by a clique. Hold back your dues as long as possible or don't pay at all. When a banquet is given, tell everybody money is being wasted on blow outs which make big noise and accomplish nothing. When no banquets are given, say the association is dead and needs a can tied to it. When you attend a meeting vote to do something and then go home and do the opposite. Agree with everything said at the meeting and disagree with it outside. When asked for information don't give it. Get all the association gives you, but don't give it anything. Take cooperation with the other fellow with you; but never cooperate with him."

YOU ARE WELCOME, ARMY COMMAND!—Typical of the increasing recognition which ADVANCED MANAGEMENT is earning from leading companies, management consultants, educational institutions, governmental agencies, business organizations, trade associations and various branches of our Armed Forces, is the following excerpt from recent letter from the U.S. Army Command and General Staff College, of Fort Levenworth, Kansas. "Please accept our sincere thanks for your courtesy and generosity in permitting the United States Army Command and General Staff College to include the Military Organization and Management course the S.A.M material from ADVANCED MANAGEMENT that we requested, and to which you hold the copyright The course is doing much to interest students in organization and management—a field so important to the military man. This interset is heightened by your contribution of excellent material."

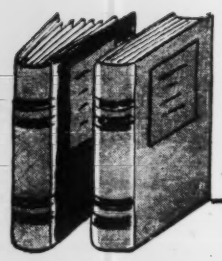
MEASUREMENT OF MANAGEMENT PROCEEDINGS NOW AVAILABLE—Complete proceedings of the Fall S.A.M Conference on Progress in Measurement of Management held in New York City last November are now available to all members First mailings have been sent to conference speakers and participants. Contents include Cooperative Planning — The Key to Successful Marketing Management, by DONALD M. HOBART· Feed-Back — The Measurement of Successful Communication, by A. C. GILBERT; Management Evaluation of Process Automation—a panel discussion by DAUSE L. BIBBY, G. LUPTON BROOMELL, JOHN JOHNSTON, JR., and HARRY C OTTEN; How To Think About Operations Research by CUTHBERT C. HURD; Measurement of Overall Management Effectiveness, by WILLIAM C. MAC MILLEN, JR.; The Management of Research and Development, by C WILSON RANDLE: Using Accounting as a Yardstick to Measure Management Performance, by FRANK WALLACE; and Conference Summary by GAVIN A PITT. Copies available from PATRICK J. REDDINGTON, Educational and Conference Director, National Headquarters, at $3.50 per copy for members and $5.00 per copy for non-members.

DISTRIBUTION DATA GUIDE—AL N. SEARES, National Vice President for Marketing, reminds members of the wealth of information, as source references, contained in the Distribution Data Guide, Special Government Periodicals issue, featuring the 1958 annual listing of all major periodicals published by the Federal Government, which contain facts and figures useful in the field of distribution. This includes not only the listing of Federal Government Periodicals, but publications in this field from business, professional and institutional organizations such as associations and foundations, Chambers of Commerce, colleges and universities, commercial organizations, and publishing companies. Copies can be obtained direct from Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

CHAPTER CHIPS—LONDON, Ontario Chapter has conducted its second two-day seminar on Production Planning and Control, with over 100 industrial and business representatives at the University of Western Ontario, School of Business Administration. Write STEWART THOMPSON, National Director, for details of this very successful two-day seminar, which earned broad publicity in three local newspapers, on the radio, and in various trade publications . . . BRIDGEPORT Chapter's newest promotion scheme is the mailing of a phony $10 bill in its own folder with details on the next Chapter meeting and a slogan "Is money important? The proper organization and control can save you Real Money" . . . LONG ISLAND Chapter has recently passed a resolution to award a $50.00 U.S. Savings Bond to any member who writes a paper that's accepted for publication in ADVANCED MANAGEMENT . . . TWIN CITY Chapter has developed its letterhead into a meeting notice separate form which comprises an announcement of regular and special meetings covering the current month, as well as coming events . . . INDIANAPOLIS Chapter has completed development of its 9th Annual S.A.M Case Study forum of two groups, with 9 sessions each, on various management development subjects. They range from planning and policy making through production controls, and include labor relations, personnel, marketing, and staff-line relationships. Other chapters interested in expanding on the current S.A.M-Harvard Case Studies would benefit by writing INDIANAPOLIS for copies of their package . . . INDIANAPOLIS Chapter also features a Management Man Of The Month at each general monthly meeting of the Chapter, with resulting public relations benefits continuing throughout the entire program year.

THE EXECUTIVE VICE PRESIDENT "GOES WEST". The S.A.M travel schedule of Executive Vice President HAROLD R. BIXLER during the month of March is in the Western Area, and includes stops (so far) at Spokane and Seattle, Vancouver, British Columbia; Portland, Oregon; Sacramento, San Francisco, Oakland, San Jose, Los Angeles, Orange Coast and San Diego, California; with some in-between points on the way. During this period he will inaugurate new S.A.M chapters in Spokane and San Jose, participate in regular monthly meetings of the western Chapters, special meetings of their Directors, new chapter development in other locations, and general organization and membership promotion activities everywhere.

S.A.M AND NATION'S BUSINESS MAGAZINE —The Society's Operations Research activities were given top recognition in the February issue of NATION'S BUSINESS, official publication of the U.S. Chamber of Commerce. The magazine's several hundred thousand readers were told about Systems Simulation as a new planning tool, in a leading article on "New Method Pre-Tests Ideas", by DONALD G. MALCOLM, Director of Operations Research, Booz, Allen & Hamilton of Chicago. Mr. Malcolm was chairman of the S.A.M 1958 Operations Research Conference session on Simulating Management Decisions, part of the Society's annual national meeting on this subject, held early in February in New York City.



New Management Writing . . .

S.A.M BOOK SERVICE

All books reviewed or listed in this department may be read or bought under the AMLS Plan, at less than publishers list price. See below for details.

PRINCIPLES OF STATISTICAL ANALYSIS

By Samuel B. Richmond, Professor of Economics and Statistics. Published by The Ronald Press Company, 18 E. 26th St., New York City. 1957. $6.50

PROFESSOR Richmond has developed a well organized document primarily designed for a student of statistical analysis, as well as an excellent reference text for industry.

The author has presented a complex problem very simply without diminishing the authenticity of the data. It is a complete introductory course in statistical analysis covering the basic theory of statistics though decision making.

The text is divided into four basic sections, "Probability and Theoretical Distributions," "Statistical Inference," "Descriptive Statistics," and "Forecasting." The subject matter is so developed that only minimum of algebra above secondary school is required.

Each chapter contains practical problems with some answers to aid the student. Also, at the end of each chapter is a glossary of symbols.

Adequate tables are included in the Appendices to complement the text.

A very extensive Glossary of Equations is supplied the reader at the back of the text, including descriptions of all the equations in the text.

The entire subject matter indicates the results of an experienced author in its formulation of information for ease of reading.

Clark M. Hubbard
Industrial Engineer
Deering Milliken Service Corporation
Greenville, S. C.

JOB EVALUATION

By John A. Patton and C. L. Littlefield; published by Richard D. Irwin, Inc., Homewood, Illinois.

AS THE authors have stated, this revised edition will serve as a helpful guide both to business groups involved in actual installations and to students who desire a thorough background in the fundamental concepts of job evaluation. And I might add that it is a job well done.

Of particular interest to members of the teaching profession, there is a rather wide selection of case problems, all based on actual situations in business firms, which can be used to illustrate the practical application of basic principles. Also, the Appendix includes some sixty-odd job descriptions for both clerical and hourly rated jobs which can be used in rating projects.

The book stresses the importance of communications during all phases of job evaluation installations. This subject of communications is too often neglected in programs such as job evaluation, and the book recognizes the importance of communications with top management, supervisors, employees, and the union. An entire chapter is devoted to relations with unions.

The excellent discussions of job analysis, job descriptions, and job specifications are aided by appropriate illustrative forms. Since Mr. Patton is President of John A. Patton Management Engineers, the material is augmented by the experiences of his firm, as well as by many forms and systems which the firm has used.

Experts and students alike will be impressed with the clear explanations of the four basic methods of job evaluation. Ranking and grading are covered in a single chapter, but there is a chapter each on the factor comparison and point methods.

The importance of the vital role usually filled by committees in job evaluation programs is recognized at numerous points in the book. As the authors state, "Because of the unscientific nature of job evaluation, it is necessary to rely, to a considerable extent, on human judgment. In order that inconsistency in judgment may be controlled, group judgment is resorted to."

Those of us who have in any way been concerned with the administration of job evaluation programs recognize that management is too frequently inclined to feel that if a plan is well established it will be self-perpetuating. The authors certainly realized this fact, and as a result have devoted an entire chapter to the subject of job evaluation administration.

The chapter on "Executive Position Evaluation" is particularly good. Emphasis is

THE ADVANCED MANAGEMENT LIBRARY SERVICE

READERS of **ADVANCED MANAGEMENT** can secure any of the books listed above, or any other current U. S. book in management or related fields from The **Advanced Management** Library Service, 3209 Columbia Pike, Arlington 4, Virginia.

Just fill out and mail this request coupon, and the books you want will be sent to you quickly by mail on a loan or purchase basis.

AMLS GROUND RULES

The services of AMLS include: (a) Unlimited loans by mail of any current books in management or related fields (Fees for this service are $1.25 per book, for two-way postage and handling charges and up to six weeks of reading time plus two weeks standard mailing time. 25c a week is charged after the first eight weeks); (b) An option to the borrower to keep any loan book he wished at a price which is progressively less than the publishers' list price as the particular book has had previous use; and (c) Supplying new copies or used copies when available of any book in print for purchase at a standard discount which is 10% for most new books.

AMLS services are available exclusively to readers of ADVANCED MANAGEMENT. The loan service is available only to readers in the continental U. S. The discount purchase service is also available to overseas readers.

Request Form

The ADVANCED MANAGEMENT Library Service

To: AMLS
3209 Columbia Pike
Arlington 4, Virginia

Please send me the following book(s):
(Insert reference numbers (e.g. A6) in appropriate column at right for books listed above.)

Write name of author and title of any book you might want that **is not listed** above, and check appropriate column at right.

Author	Title	List Reference Numbers below: Under AMLS loan plan	New books to buy	Used books to buy*

*if available

Send book(s) to:
NAME.....

ADDRESS.....

placed on factors or components that are common to executive positions. Special attention is given to factors used in existing plans as well as to the adequacy of the four basic methods as related to executive job evaluation.

Readers will also be interested in the thorough presentation of merit rating, to which a generous chapter is devoted.

Certainly this book is a welcomed addition to management literature. The authors saw a need for a clear, well co-ordinated, and up-to-date presentation of the basic subject matter of job evaluation, and any person who is concerned in any way should take advantage of their findings.

S. Kyle Reed, Ph.D.

Industrial Engineer—Union Carbide Nuclear Company, Oak Ridge, Tennessee
Principal — Doulet, Reed and Associates, Knoxville, Tennessee

REVIEWS IN BRIEF

Management Theory and Practice

A.8 **ORGANIZATION by Edward F. Breck. 437 pp. Longmans. 1957. $8.75**

A rounded review of the theory and practice of organization which is here well described as "the framework of management." Designed especially for top management in large organizations, it stresses the key role of such leaders in erecting and maintaining an organizational structure through which the enterprise can work effectively to achieve its objectives.

A.9 **EFFECTING CHANGE IN LARGE ORGANIZATIONS by Eli Ginzberg and others. 171 pp. Columbia. 1957. $3.50**

A pioneering investigation into the problems encountered when a large organization seeks to alter its basic structure in order to improve operations. Based on extensive case materials from business and government experience, the book is the first effort to apply recent social sciences and psychological knowledge to the highly important practical field it covers. Gives particular attention to the key role which executives at various levels play in making a change of this sort a success or a failure.

A.10 **LEADERSHIP IN THE TWENTIETH CENTURY by Lyndall F. Urwick. 95 pp. Pitman. 1957. $2.75**

A keen analysis of the meaning of leadership in the world today; the characteristics of a good leader, particularly in business, management or public administration; and ways of developing future leaders. Written by one of the world's great authorities on management theory.

A.11 **BIG BUSINESS AND HUMAN VALUES by Theodore V. Houser. 115 pp. McGraw-Hill. 1957. $3.50**

A penetrating examination of personnel policy in the broadest sense of the basic relationships between a business and the people who work for it. Written by the Chairman of the Board of Sears, Roebuck and Company.

A.12 **MAKING MANAGEMENT HUMAN by Alfred J. Marrow. 252 pp. McGraw-Hill. 1957. $5.00**

An application of the know-how of modern psychology and human relations studies to down-to-earth management problems. Written by a leading business executive who is also a trained psychologist, the book gives solid guidance on how to create the satisfying and harmonious climate in a work situation which many studies have shown makes the difference between high output and low.

A.13 **PERSONALITY AND ORGANIZATION by Chris Argyris. 304 pp. Harper. 1957. $4.00**

Subtitled: "The conflict between system and the individual," this book takes a hard but constructive look at current handling of the human factor in large organizations. Shows how some present management practices tend to intensify employee antagonisms rather than to decrease them and points the way to a workable pattern of human relationships in such organizations.

A.14 **TOWARD THE AUTOMATIC FACTORY by Charles R. Walker. 254 pp. Yale. 1957. $5.00**

Progressive automation has long been recognized as creating major human relations problems. This book is a detailed case study of the specific effects of a major shift to semi-automatic operation on individual workers and the other people involved.

A.15 **AUTOMATION AND MANAGEMENT by James R. Bright. 280 pp. Harvard Business School. 1958. $10.00**

A comprehensive report of the findings of a pioneering research project conducted by the Harvard Business School which was designed to provide a broad analysis of the potentialities, limitations, and implications for management of recent technical developments in automation of both data processing and manufacturing methods.

Management Tools and Techniques

B.10 **THE TECHNIQUES OF DELEGATING by Donald A. and Eleanor C. Laird. 225 pp. McGraw-Hill. 1957. $3.75**

The first book completely devoted to the subtle and important executive art of getting things done through others. Discusses psychological aspects as well as specific techniques such topics as knowing when and to whom to delegate and how to do it successfully. Failure to delegate properly is one of the most widespread failings of otherwise effective administrators so this book can make a real contribution to good management.

B.11 **BETTER BUSINESS COMMUNICATION by Dennis Murphy. 313 pp. McGraw-Hill. 1957. $4.50**

A rounded review of all aspects of the problems of communication in a management context. Reflects the increasing awareness that special skill is required to achieve genuine communication through any of the devices through which ideas are transmitted — writing, speaking and listening. Includes case studies of effective and ineffective communication efforts.

B.12 **HANDLING BARRIERS IN COMMUNICATION by L. L. Lee. Harper. 1958.**

B.13 **BUDGETING: Profit Planning and Control by Glenn A. Welsch. 510 pp. Prentice-Hall. 1957. $10.60**

A full review of the role of budgeting as a management tool. Emphasizes the significance of effective budgeting in overall planning and control of any operation. Covers both techniques and practical applications to specific business situations.

B.14 **OVERHEAD ACCOUNTING by R. Lee Brummet. 169 pp. University of Michigan School of Business Administration. 1957. $5.00**

A reexamination of the concepts and methods of calculating overhead costs in manufacturing enterprises. A valuable study in a field of key management importance.

B.15 **DYNAMIC PROGRAMMING by Richard E. Bellman. 367 pp. Princeton. 1957. $6.75**

B.16 **GAMES AND DECISIONS by R. Duncan Luce and Howard Raiffa. 528 pp. Wiley. 1957. $8.75**

Two new books which develop different aspects of Operations Research, the latest tool of research and management. The first is labeled "an introduction to the mathematical theory of multi-stage decision processes," and the second is called "a critical introduction to the central ideas and results of game theory and related decision-making models."

B.17 **PRINCIPLES OF STATISTICAL ANALYSIS by Samuel B. Richmond. Ronald Press. 1957. $6.50**

B.18 **THE MANAGEMENT APPROACH TO ELECTRONIC DIGITAL COMPUTERS by Sandford J. Smith. 238 pp. Essential Books. 1957. $6.30**

Another book for top managers, designed to give them a rundown on what the new electronic brains can and cannot be expected to do in increasing industrial efficiency and management control.

B.19 **PERSONNEL MANAGEMENT by Clarence H. Northcott. 435 pp. Philosophical Library. 3rd ed. 1956. $10.00**

A review of the principles and practice of personnel administration covering organization and policy, wage problems and general industrial relations.

Personal Development

C.1 **PUTTING YOURSELF OVER IN BUSINESS by Frederick Dyer and others. 206 pp. Prentice-Hall. 1957. $4.95**

A simply-written and highly practical book on all aspects of presenting something to others effectively—whether the thing to be sold is a product, an idea, or, most important, yourself! Covers basic and more advanced presentation techniques and beyond this, gives specific tips on how to get along with different types of people.

C.2 **HOW TO GROW IN MANAGEMENT by James M. Black. 259 pp. Prentice-Hall. 1957. $4.95**

A practical guide to ways and means of developing oneself into the kind of person who is prepared to advance up the management ladder and of actually doing so. Covers the principles of success and how to adapt them to one's own characteristics and situation.

C.3 **ARE YOU LISTENING? by Ralph G. Nichols and Leonard A. Stevens. 247 pp. McGraw-Hill. 1957. $3.75**

Another pioneering book on a subject of vital concern to management, education, and the world of sales, radio, and television. Listening is, of course, a key part of any executive's job, yet a surprising number of people just don't know how to take in what they hear. This book gives scientifically-based tips on how to capture the highlights of a talk or a conversation; how to concentrate; and how to avoid bad listening habits.

C.4 **TALK THAT GETS RESULTS by Karl C. Ingramm. 203 pp. McGraw-Hill. 1957. $3.95**

The other link in the chain of effective communication—clear and concise talking and writing—is covered in a down to earth way in this new self-help guide. Especially emphasizes ways of tuning what you say to the psychological wave length of the particular person or group to which you are talking.

The Wider View

D.1 **THE AMERICAN BUSINESS SYSTEM by Thomas C. Cochran. 235 pp. Harvard. 1957. $4.75**

A histor yof the last half century of business development in the U. S. This period was marked by basic changes in the structure of American business; its technology; and its role in our society. This book neatly fits all the pieces together and puts them in the perspective of history.

D.2 **A HISTORY OF INDUSTRIAL CHEMISTRY by Frank S. Taylor. 483 pp. Abelard-Schuman. 1957. $7.50**

A history of the last half century of business principles and practice of industrial chemistry, showing the relationship of chemical theory to industrial applications.

D.3 **THE ART OF OVERSEASMANSHIP by Harlan Cleveland and Gerald Mangone, editors. 167 pp. Syracuse. 1957. $3.00**

The implications of the startling fact that over 100,000 Americans now work overseas are examined in this trail-blazing study written by a battery of experts. The essays included analyze who these people are; what they are doing; and the key factors which make for success or failure in this new, demanding and important kind of work.

D.4 **THE AGE OF PSYCHOLOGY by Ernest Havemann. 124 pp. Simon & Schuster. 1957. $3.50**

A basic and understandable explanation of psychology, psychiatry and psychoanalysis. This is an expanded and revised version of the famous series which appeared in Life Magazine recently. It is a complete and up-to-date appraisal of how these new sciences have developed, what they include and their significance today.

Presentation Of University Chapter Awards

S.A.M University Chapter Promotion Awards have been made to the following chapters: CINCINNATI (2), DETROIT, PHILADELPHIA, INDIANAPOLIS, KANSAS CITY, GREENVILLE, COLUMBUS, and NORTHEASTERN PENNSYLVANIA. Participating at the presentation were: (left to right) HAROLD FISCHER, Vice President of University Chapter Division; SANFORD M. BROOKS, Cincinnati; JOHN T. JONES, Jr., Northeastern Pennsylvania, and ELWYN H. KITTREDGE, Jr., Greenville.

Ten new chapters have recently been added to the University Division, and indications are that nine more will be chartered during the first part of the second semester, with others joining later in the Spring.

TYPICAL S.A.M CHAPTER ACTIVITIES—APRIL 1958

CHAPTER	SUBJECT	SPEAKER	PLACE	DATE
Alabama	"The Wives' Role in Management"	**V. C. Henrich,** Vice President & Plant Manager, Rohn & Haas Co., Houston, Texas		8
Baltimore	Plant Workshop		Fisher Body & Chevrolet Div. of GMC, Baltimore	23
Binghamton	"Management Development"	**Lou Baker,** Training Director of American Machine & Foundry	Carlton Hotel	9
Boston	Panel Discussion—Selection & Evaluation of Management Personnel	**Dr. Francis F. Bradshaw,** Richardson, Bellows, Henry & Co., N. Y., N. Y. **Charles D. Orth, III,** Asst. Professor, Harvard Business School, Cambridge, Mass. **Moorhead Wright,** Consultant, Advance Management Course, Development Consulting Service, GE Co.		10
Bridgeport	"A Look Ahead"	**Herman W. Steinkraus,** President, Bridgeport Brass Co.	Indian Room, Algonquin Club	1
Central Pa.	"Electronic Data Processing"	**K. E. Finley,** I.B.M. Sales Representative	Green Gables, Lewistown, Pa.	17
Charlotte	"Return on Investment—A Guide to Management Decision"	**Russell B. Read,** Planning Director, Westinghouse Electric Corp., Pittsburgh, Pa.	Hotel Barringer	15
Chicago	"How to Develop Guides to Determine How Modern Your Company Really Is"	**George T. Pfifer,** Vice President, Finance, E. W. Bliss Co.	Furniture Club of America	22
	"The Industrial Engineer's Role In Job Evaluation"	**Robert B. White,** Management Consultant, Peat, Marwick, Mitchell & Co.	Furniture Club of America	8
	"The Opinion Survey Bugaboo"	**Ed Ryan,** Editor Personnel Service, Dartnell Corp.	Toffenetti's Restaurant	21
	"New Techniques for Developing Statistical Data:"	**Merle D. Schmid,** Purdue University, Calumet Center	Hardings Presidential Grill	4
Cleveland	"Management Philosophy"	**O. A. Ohmann,** Standard Oil of Ohio	Lake Shore Country Club	7
Detroit	"Management Development Through After Hours Training—Objectives & Results"	**Dr. Dallas L. Jones,** School of Business Administration, University of Michigan	Rackham Educational Memorial	23
Fox Valley	"Cost Reduction"—All Day Spring Clinic		Elks Club, Appleton, Wisconsin	10
Greensboro	"Evaluation of Technical and Management Type Occupations"	**B. W. Ruthven,** Chief Personnel Service Branch, Division of Personnel, Tennessee Valley Authority, Knoxville, Tenn.	Starmount Country Club	8
	Clinic-9:30 a.m. to 4:00 p.m. each day. Job Evaluation Clinic & Psychological Testing Clinic		Starmount Country Club	7 & 8
Greenville	Ladies Night	**George L. Rankin,** Vice President, A. & P. Tea Co.	Elks Club	21
Hartford	"Responsibilities of Supervision"	**John J. Joynt,** Vice President of Management Planning, New York Central Railroad	Bond Hotel	17
Hudson Valley	"Suppose The Boss Has No Daughter"	**Elliott I. Peterson,** Vice President In Charge of Mfg., Southern Mills, Mohasco Industries, Inc.	Hot Shoppe Restaurant Albany, N. Y.	1
Kansas City	"Organization-Expression of Management"	**John J. Joynt,** Vice President of Management Planning, New York Central Railroad	Elks Club	15
Knoxville	"The 6th Factor in Business"	**Dr. James L. Brakefield,** Director of Public Relations, Liberty National Life Ins. Co.	Deane Hill Country Club	8
Lancaster	"Management's Not-So-Silent Partners"	**Jean Wade Rindlaub,** Vice President, Batten, Barton, Durstine & Osborn, N. Y., N. Y.	Hotel Brunswick	15
Lehigh Valley	"Labor Looks at Industrial Engineering"	**David Lasser,** Director of Research and Education, International Union of Electrical, Radio & Machine Workers, AFL-CIO, Washington, D. C.	Walp's Restaurant, Allentown, Pa.	1

TYPICAL S.A.M CHAPTER ACTIVITIES—APRIL 1958

CHAPTER	SUBJECT	SPEAKER	PLACE	DATE
London (Ont.) & District		**W. F. Holding,** President & General Manager, General Steel Wares Limited	Queen's Park Administration Building	24
Milwaukee	"What It Takes to be a Manager"	**J. M. Fox,** President, Minute Maid Corp., N. Y.	Engineer's Society Bldg.	10
Montreal	"One Year's Railroading with the C.P.R. Computer	**J. B. Rollit,** Special Asst. Research, Canadian Pacific Railways	Ritz-Carlton Hotel	9
Nashville	"Delegating Responsibility"	**Hugh S. Comer,** Chairman, Board of Directors, Avondale Mills, Sylacauga, Alabama	Hermitage Hotel	10
New Haven	"Human Motivation for Cost Reduction"	**Jerome Barnum,** Chairman, J. Barnum Associates, Scarsdale, New York	Colonial House, Hamden, Conn.	17
No. Alabama	"The Role of Management"	**Dr. John J. Corson,** Vice President, McKinsey & Co., Inc.	Hotel Russel Erskine	9
No. New Jersey	11th Annual Conference "Arbitration"		Hotel Essex House, Newark, N. J.	4
	"Human Motivation for Cost Reduction"	**Jerome Barnum,** Chairman, J. Barnum Associates, Scarsdale, N. Y.	Essex House	10
N. E. Penna.	"The Incident Process Grievance Procedure"—A Case Study		Hotel Jermyn, Scranton, Pa.	7
Philadelphia	"Hospital Management Looks to Industry"	**Edwin L. Taylor,** Administrator, Graduate Hospital, Philadelphia, Pa.		1
Pittsburgh	"Prefabricated Housing & Its Future"	**H. D. Moulton,** President, United States Steel Homes Division, United States Steel Corp.	Gateway Center	17
Portland	Meeting & Plant Visit Machining & Assembly of Aircraft Parts & Subassemblies	**Frank J. McCanna,** Iron Fireman	Iron Fireman Mfg. Co.	9
	"Market Research"	**John Paulson,** P. & G. Mfg. Co.	Public Service Bldg.	23
Poughkeepsie	"Appraisals-An Experiment in Method"		Nelson House	8
Providence	"Labor & Management-Where Are We Headed?"	**Victor Riesel,** Columnist, "The New York Mirror", New York City, N. Y.	Rhodes-On-The Pawtuxet	3
Raritan Valley	"Manufacturing Process of Cigarette Paper"—Plant VISIT & Meeting	**Joseph Master,** Supervisor, Quality Control & Research, Peter J. Schweitzer, Inc., Spotwood, N. J.	Peter J. Schweitzer, Inc.	16
Reading	"Decision Making In Selection of Management Personnel"	**H. B. Bartlett,** Executive Vice President, General Manager, Parish Pressed Steel Co.	Iris Club, Wyomissing, Pa.	14
St Louis	Student Night			8
Tren.-Del. Valley	"Accident Prevention"	**Douglas W. Brown,** General Supervisor, Safety, Fairless Works, U. S. Steel Corp., Fairless Hills, Pa.	Hotel Hidlebrecht	15
Twin City	Industrial Relations Conference			
Washington	"Management Development in a Military Organization"	Office of the Coordinator, Air Force Management Development Program	Occidental Restaurant	23
Western Mass.	"Plant Visitation-New Layout Process"	Arranged by **P. J. Equi,** Director of Training & Community Relations, The Worthington Corp., Holyoke, Mass.		16
W. No. Car.	The Southeastern Regional Conference Knoxville Chapter acting host		Gatlinburg, Tenn.	
Wilmington	"The Logic of Efficiency"	**Dr. Robert P. Becht,** Chairman, Industry Dept., Wharton School, Univ. of Pa.	Lord de la Warr Hotel	8
Worcester	"Functions of the Massachusetts Business Development Corporation"	**Francis Brennen,** Executive Vice President, Mass. Business Development Corp.	Worcester Airport	21

(*Continued from page 21*)

good ones—particularly if we are to develop and support the weapons of tomorrow which we must have to survive. We must also use wisely the skilled men we have and not waste them on jobs others can do.

'Fourth, we must encourage more of our youth to aspire to military careers in order that our Armed Forces remain truly effective components of our national strength.'

"But now, I'm in the field of words again. They require translation into action. Always before in our history, we have had the time to marshal our vast resources and prove our strength in the crucible of war. In the present state of weapons technology, we must prove our strength *before* war comes, not after. Time to organize our wealth and translate it into power is a luxury—a luxury we will never have again. If war should be forced upon us, we must fight it with strength *in being* and not with potential.

"I am not worried about our military strength as of this moment, or next year, or the year after. On the other hand, I am concerned about three, five, ten, and even twenty years from now. Don't let anyone convince you that America doesn't have sufficient retaliatory strength today to deter the Russians from attacking us. We do—but we can't rest on our oars. If we do, we may arrive some day at what has been called a disaster point—a point where the leaders in the Kremlin become convinced that they can devastate this country and not be destroyed in return.

"If we are to prevent arrival at this disaster point—and we must—it will require the combined long-term efforts of the military, the Executive, the Congress, and finally, of all the people. Of these, the most important is the people. They must receive and understand the message of danger—the threat to the very existence of everything that makes this country great. Their reaction must also be determined, objective and sound, not hysterical. Once that message gets across in this way I have no fears for America nor for continued peace in the world.

"Mr. Reuben Robertson, I join with the Society for Advancement of management in saluting you. The honor that Society bestows upon you tonight is a tribute not only to your achievement, but to the strength that is America—the strength of the free enterprise system. The muscle and the sinew of that great system—a system you have done so much to promote and perfect—is capable of outdistancing any other system which holds the mass of its workers in contempt, bondage, and fear. The spirit which prevails in organizations like the Champion Paper Company is the kind of spirit that makes America unbeatable. May we all profit by your example." ■

Your new guide to successful human management

The Administrative Process

By Robert H. Roy

Today's management problems in every kind of business, industry, or government office, are radically changed — different even from those of only a decade ago. This unique book takes these changes into account, to give a truly useful and up-to-date idea-starter and problem-solving guide. $5.00

THE JOHNS HOPKINS PRESS
Baltimore 18, Maryland

Services Benefits Privileges of membership in S. A. M.

The New Program of the Society for Advancement of Management has been outlined in a brochure which is now being distributed to the chapters, the members, or to anyone who wishes to know what it means to be a S.A.M. member.

The new brochure is available to chapters in quantity, for distribution to prospective new S.A.M. members. The brochure outlines clearly and concisely the Services, Benefits and Privileges of S.A.M. membership, supplementing any chapter promotion in this area.

For those who are not members of S.A.M., but would like information concerning this oldest chapter management association in the U. S., a brochure and application form containing the requirements for membership will be sent on request.

Address requests to:

SOCIETY FOR ADVANCEMENT OF MANAGEMENT
74 Fifth Avenue, New York 11, N. Y.

ORGANIZATION

If you open a business and hire one man you will establish a working relationship with that man. And if your business prospers and you need a hundred men, or ten, or fifty, you may establish a hundred, or ten or fifty working relationships or you can establish An Organization.

When Andrew Carnegie said, "Take away all our factories, our trades, our avenues of transportation, our money, but leave me our organization, and in four years, I will have reestablished myself.", he was saying that, for that particular time in his business, all the following had been evaluated and found to be good.

People had been selected on the basis of technical, managerial, or other skills.

Decisions had been made to group activities by product line, by geographic area, by function or task.

The validity of centralization or decentralization had been established.

Duties and authority had been defined for each member of the management group, and these were understood and allotted.

Responsibility was not only accepted, it was a way of life.

There was a "working together" in harmony and a unity of purpose.

Other matters also to be studied in developing an organization: The growth pattern of the individuals who will move up the line; the "informal organization" which considers personality factors completely outside of the area of technical competence but vastly important to coordination; the expert staff and its need or value; the purpose and objectives of committees; and many others.

There is no standard package. Every business is a complex of human capacities and relationships, products and equipment, space and finances, aspirations and realities. Because of this, every approach to an organization pattern is a highly technical and deeply penetrating study in which every approach and each aspect should be carefully evaluated in terms of the strengths and weaknesses involved. Present operating arrangements should be charted and present executive, managerial, or supervisory activities defined. Alternative plans should be drawn and studied and a program developed to attain an enduring relationship which recognizes that all work is accomplished through people who coordinate one with another, and whose activities are effectively integrated.

With a blue print of present operating arrangements, with the tools to use in the form clearly understood leadership responsibilities, and with a plan for development and strengthening which is flexible and dynamic, shock can be withstood, confident moves can be made toward attaining objectives, but, what is most important to every stockholder or employee —there will be AN ORGANIZATION.

Charles Saunders-White
Partner, Lawrence-Leiter & Co.,
Kansas City, Missouri

S.A.M Rating of Time Study Films

EIGHT REELS depicting 24 typical manufacturing and clerical operations alternately shown in five separate scenes. Composite time-values, based on the judgment of 1200 experienced time study men, afford comparison with the national average.

A DO-IT-YOURSELF suggestion: Take pictures of your benchmark operation. Splice them in the S.A.M films of known ratings. Thus you can establish ratings for your own operations.

NOW IN USE THROUGHOUT MOST OF THE FREE WORLD

as

- **The Classical Reference in Training and Refreshing Time Study Men**
- **An Objective Ground for Settling Standards Disputes**
- **A Swift, Economical Means of Achieving Rating Consistency Toward a Fair Day's Work**

Research Division

SOCIETY FOR ADVANCEMENT OF MANAGEMENT

74 Fifth Avenue • New York 11, N. Y.

CLASSIFIED

POSITIONS WANTED

MANAGEMENT ASSISTANT

Young experienced retail merchant (in 3 yrs. assumed $1,000,000 volume) seeks a greater challenge in marketing or industrial management fields. Married; family; AB Dartmouth; MBA Univ. of Calif. Box 451-W.

INDUST. REL. DIR.

Available — Member bar of Mich., Ariz., Puerto Rico, U.S. Supreme Court. 15 yrs. admin., labor law, govt. title work, union negot. at top levels. Age 48. Resume on request. Motor City Employment, 1402 Industrl. Bldg., Det. 26, Mich. Wo. 2-9720.

POSITIONS OPEN

METHODS & PROCEDURES MANAGER

Age 30-45. College trained. Broad Experience in Procedures Analysis and Systems work. Accounting knowledge a "must", but general background must be such as to provide flexibility and adaptability in quickly appraising operating procedures of any department in large Northern Ohio bank. Considerable familiarity with applications of electronic data processing equipment and ability to assess practicality of such equipment now in research stages for banking applications. Send confidential resumé to Box 452-O.

PROFESSIONAL

BRUCE PAYNE
AND **ASSOCIATES** INC.
MANAGEMENT CONSULTANTS

WESTPORT, CONN. • NEW YORK
ATLANTA • BOSTON • BUENOS AIRES
CHICAGO • DALLAS • MONTREAL • TORONTO
MEXICO CITY • RIO DE JANEIRO • SAO PAULO
FRANKFURT • MILAN

RATES: Classified insertions billed at $1.50 a line per issue for Positions Open, $1.00 for Positions Wanted. Lines average 30 characters. Boldface heading counts as two lines. There are 7 lines to an inch. Minimum insertion charge on five-line basis. Display ads at a minimum of 1½ inches. Copy required not later than the 12th of month preceding publication date.

Answers to box number ads should be addressed to given box number, care of ADVANCED MANAGEMENT, 74 Fifth Ave., New York 11, N. Y.